

April Talon

From: Todd Selig
Sent: Friday, January 15, 2021 8:40 AM
To: Howard, Theodore
Cc: April Talon; Richard Reine
Subject: Re: Mill Pond Dam - following up with Ted Howard

Dear Ted,

Thank you very much for this additional feedback concerning the future of the Mill Pond Dam on the Oyster River. I know the members of the Council will appreciate it.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "Howard, Theodore" <Ted.Howard@unh.edu>
Date: Thursday, January 14, 2021 at 10:06 PM
To: Durham Town Council <council@ci.durham.nh.us>
Subject: Mill Pond Dam
Resent-From: <council@ci.durham.nh.us>

Dear Councilors,

Thank you for the opportunity to express my view on the alternatives and to hear others with supporting and contrasting perspectives. We all appreciate the work Council and many people have done to contribute to our collective understanding of all the issues.

Science was invoked by many speakers, including me, and more than one speaker suggested that the science was settled. It is not. If the question were narrowly constrained to be "which alternative, #3 or #5, will provide better water quality and a greater probability of improving anadromous fish habitat over an additional reach of the Oyster River, perhaps even to the Oyster River Reservoir dam?", then the scientific evidence favors Alternative 5. But the question science should address is broader. The more holistic question is "what are the environmental and ecologic outcomes of each of the two alternatives?"

As noted above, water quality and fish habitat may gain from removal. Reconstruction of the dam has its environmental and ecological benefits as well: maintenance of a relatively scarce open fresh water ecosystem, retention of toxic materials in trapped sediments (no dredging), prevention of the creation of acres of invasive plants on newly exposed soil that will be costly for the town and property owners to control, and potential protection of species of concern identified by the Natural Heritage Bureau.

How we weigh these scientific answers regarding environmental and ecological outcomes in our subsequent decision is *not* a matter of science – it is a matter of human values. As such, ecologic trade-offs are just a part of the larger set of community decision criteria that include fiscal concerns, historical and cultural values, aesthetics, and recreation opportunities.

In closing, I note that one maxim for sustaining natural resources is to avoid irreversible decisions (there is a large body of environmental economics literature on this topic). Reconstruction of the dam maintains options for future action. I hope you choose Alternative 3 (without dredging).

Sincerely,

Ted Howard
12 Burnham Ave

Theodore E Howard
Professor of Forestry Economics and Faculty Fellow
College of Life Sciences and Agriculture
University of New Hampshire
Durham, NH 03824

April Talon

From: Todd Selig
Sent: Friday, January 15, 2021 9:13 AM
To: April Talon; Richard Reine
Subject: FW: Letter to support removal of mill pond dam - Matthew Larkin

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
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From: matthew larkin <larkin.matthew1@gmail.com>
Date: Thursday, January 14, 2021 at 6:23 PM
To: Durham Town Council <council@ci.durham.nh.us>
Subject: Re: Letter to support removal of mill pond dam
Resent-From: <council@ci.durham.nh.us>

On Thu, Jan 14, 2021 at 6:12 PM matthew larkin <larkin.matthew1@gmail.com> wrote:

Dear Durham Town Council members,

I write to express my strong support for removal of the Mill Pond dam.

I am a UNH graduate with a bachelor's degree of Science in Environmental and Resource Economics who has worked in the field of natural resource conservation for the past nine years. I have reviewed the studies and concluded the option for the removal of the Mill Pond dan provides the greatest environmental and economic benefit to the town of Durham.

As stated in public comment during the meeting on January 11, 2021 by many environmental scientists and professionals removing the Mill Pond Dam will help restore the ecological functions of the river.

I have a high level of respect for the historical and cultural features of the town. However, the benefits of removal far outweigh the costs of repairing the dam.

Mill Pond dam cuts off vital habitat required for the health and success of anadromous species. The current fish ladder provides access to habitat so degraded that the species that use it often cannot survive.

Sincerely,

Matthew Larkin, Durham resident

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Matthew Larkin

345 Durham Point Road

Durham, NH 03824

(631) 335-3933

larkin.matthew1@gmail.com

--

Matthew Larkin

345 Durham Point Road

Durham, NH 03824

(631) 335-3933

larkin.matthew1@gmail.com

April Talon

From: Todd Selig
Sent: Friday, January 15, 2021 10:23 AM
To: Peter Stanhope
Cc: April Talon; Richard Reine
Subject: Re: Mill Pond Dam - feedback from Peter Stanhope

Dear Peter,

Thank you very much for your email regarding the future of the Mill Pond Dam on the Oyster River. We've shared your thoughts with the Council for them to consider along with the detailed VHB report on the subject and the many pieces of correspondence received from people who favor both the preservation and removal of the historic dam. I hope this response finds you well!

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
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From: Peter Stanhope <pestanhope@stanhopegroup.com>
Date: Friday, January 15, 2021 at 10:19 AM
To: Todd Selig <tselig@ci.durham.nh.us>
Subject: Mill Pond Dam

Good morning Todd,

I have not followed the Mill Pond/Dam discussion closely, believing that the unanimous vote by the TC when I served stating the dam and pond had historic significance and would be preserved would not be reversed without a threat to life or property. I appreciate there is a cost involved in preservation but that was understood when the vote was taken. I compare any costs to preserve with the hundreds of thousand dollars Durham has willingly committed to preserving land from development, protecting those cotton tail rabbit's habitat, and intervening in the Eversource transmission line approval process. All of these expenditures are what Durham prides itself on and the residents accept that responsibility for by paying property taxes that are inclusive of some or all of such expenditures.

If the TC reverses a decision in place that will result in the erosion in the level of trust in government we have experienced at the federal level of late. I have assumed the same standard the Supreme Court applies in overturning a prior decision would apply here.

I respectfully expect the TC will preserve this significant part of Durham's history and uphold the TC decision in place.

Regards,
Peter Stanhope

April Talon

From: Todd Selig
Sent: Friday, January 15, 2021 11:08 AM
Cc: April Talon; Richard Reine
Subject: FW: My additional Comments - Feedback from Coleen Fuerst Re: Mill Pond Dam

Dear Members of the Council,

For your general information from Coleen Fuerst relative to the Mill Pond Dam.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Coleen Fuerst <cfuerst@durhamboat.com>
Date: Friday, January 15, 2021 at 10:59 AM
To: Larry Harris <Larry.Harris@unh.edu>, Jeffrey & Tina Hiller <Jeffreyhiller@comcast.net>, Daniel Day <rbdan@comcast.net>, Pele Harrison <peleharrison@yahoo.com>, "Polk, Keith" <Keith.Polk@unh.edu>, Scott Letourneau <sletomd@gmail.com>, "Newkirk, Thomas" <Thomas.Newkirk@unh.edu>, Dennis Meadows <latailled@aol.com>, Stephen Burns <burns.sk@gmail.com>, "sgmac@aol.com" <Sgmac@aol.com>, Susanna Nichols <susannanichols@optonline.net>, Daphne Gowland <daphnegowland@yahoo.com>, "Cataneo, David" <David.Cataneo@unh.edu>, "janzalone@comcast.net" <janzalone@comcast.net>, "England, Richard" <Richard.England@unh.edu>, Chris Gowland <cjgowland@gmail.com>, "h. heilbronner" <h.heilbronner@comcast.net>, Greg Sancoff <sancoffg@aol.com>, Beth Olshansky <Beth.Olshansky@comcast.net>, schwartz leslie <totographs@comcast.net>, Annmarie Harris <annamie@comcast.net>, "Freedman, Diane" <Diane.Freedman@unh.edu>, Tom Toye <tom@arthurthomasproperties.com>, Joshua Meyrowitz <Prof.Joshua.Meyrowitz@gmail.com>, Jim Munsey <munseysports@aol.com>, "Polk, Janet" <Janet.Polk@unh.edu>, Deb Munsey <debmunsey@aol.com>, Janet Mackie <janet.mackie@comcast.net>, Cindy Cooper <csoffencooper@gmail.com>, Sandy & Roger Evans <evans15@comcast.net>, Doug Worthen <dougworthen@gmail.com>, Suzanne Loder <Sunnysuzy2@yahoo.com>, Diana Carroll <dianacarrollnh@gmail.com>, Todd Selig <tselig@ci.durham.nh.us>
Cc: Joan Bigwood <joanbigwood@gmail.com>, Jeff Osborn <jeff@osborncapital.com>
Subject: My additional Comments

To All:

I was on the Technical Review Committee (TRC) for the Lamprey River when it was one of two rivers, the Lamprey River, in the State studied by NHDES as models for the designated rivers program. One result was to mitigate extreme drought,

by mandating pulses of water that must be released from Pawtuckaway Lake and Mendums Pond at the gage at Packers Falls when translated velocity in cubic feet per second falls to a designated value to protect “flow-dependent” uses.

Since then, a number of rivers have been studied by NHDES and more in the future will be for inclusion as a designated Rivers Program. The Oyster River is on the list of rivers to be studied in the future, according Wayne Ives, NHDES.

I recommend it would be prudent to wait until NHDES studies the Oyster River in detail prior to the vote of Mill Pond Dam, which is both a Low Hazard Dam and a Headwater Dam on the Oyster River. Perhaps after the NHDES study they will recommend a reasonable amount of water be released from the water treatment plant Reservoir without any further depletion on the Lamprey River. This could result in a more habitable spawning areas for anadromous fish with an upgrade to the fish ladder to allow two-way migration. If there is a natural legacy-falls under the dam, as seems likely, because at the Lamprey River that river also has Dam remnants just upstream from the Macallen Dam and high ledge, under the Rt. 108 bridge in Newmarket. If the Macallen Dam had been removed, the fish ladder would have to be removed as well, if is doubtful that any, anadromous fish would get more then 200 meters upstream of the present location of the dam. These two water sheds are related as they actually cojoin during high flood events.

See what was written a description of the protected entities on the Lamprey River:

“A. Definition of Protected Instream Flows and Identification of Protected Entities

The Instream Flow Pilot Program’s legislatively defined protection goals are to maintain water for instream public uses, protect the resources for which the segment is designated, and to regulate the quantity and quality of instream flow along a designated river to conserve and protect outstanding characteristics. Maintaining the protected instream flows attains the water quality standards for flow quantity. Management of this waterbody, therefore, should be conducted so as to maintain the protected flows.

Specific categories of the instream public uses, outstanding characteristics and resources are described in RSA 483, the New Hampshire Rivers Management and Protection Program. Collectively, the instream public uses, outstanding characteristics and resources are called the “protected entities” in the Instream Flow Program. The protected entities in the Lamprey River watershed include boating; recreation (fishing, swimming); hydropower; public water supply; archaeological resources; the natural riparian corridor ecosystem; rare, threatened, and endangered species; and aquatic flora and fauna.

The processes for defining the protected flows and developing the water management plan are described in administrative rule Chapter Env-Wq 1900 Rules for the Protection of Instream Flow on Designated Rivers, commonly called the Instream Flow Rules. Each of the protected entities identified in statute was studied to determine its relationship to the Lamprey River, and specifically whether the entity was flow dependent. Those entities that were not flow dependent were not studied further.

The Lamprey River’s protected entities were identified and listed as described under the Scope of Work for the Lamprey Instream Flow Pilot Program project (Normandeau Associates, Inc. et al. 2005). The protected entities were verified and assessed for their flow dependence in a report (DES 2006). Only the flow-dependent members of the protected entities were assessed for instream flow protection needs. The determination of whether an identified entity was considered to be flow- dependent was based on biological or physical needs. The list of identified entities includes:

- Recreation (boating, fishing, and swimming);
- Maintenance and enhancement of fish and aquatic life (native fish, introduced fish, Anadromous fish, mussels, and insects);
- Fish and wildlife habitat (fish life stages, floodplains, wetlands, and associated waterbodies);
- Rare, threatened and endangered species (RTE) (fish, wildlife, vegetation, and natural/ecological communities).

Public water supplies were initially identified as flow dependent because water quality standards contained flow conditions for withdrawals. However, it has since been determined that public water supplies should not have an instream flow determined for them. First, public water supply does not represent an instream public use as defined in statute as an entity requiring a protected instream flow. Second, a defined protected flow specifically for a public water supply would be an allocation of water. An allocation process is not sustainable since any new water system would also require an allocation. Further, there are no flow-related criteria for quantifying such an allocation. Instead, public water supplies will be sustained, as will all other uses, by maintaining the natural variability of flows as defined by the Natural Flow Paradigm.

Flow-dependent protected entities were studied to determine the flow components necessary for their function, as well as any constraints, such as season-specific needs. The detailed delineation, flow needs, discussion, and assessment of each water use/resource

is described in the report *Instream Public Uses, Outstanding Characteristics, and Resources of the Lamprey River and Proposed Protective Flow Measures for Flow Dependent Resources* (DES 2006). In summary, they fell into the following categories:

- Human Instream Public Uses
 - Boating
 - Swimming
 - Fishing
- Fish & Aquatic Life
 - Native Fish
 - Introduced Fish
 - Anadromous and Catadromous Fish
 - Mussels
 - Macroinvertebrates
 - Rare, Threatened, or Endangered Fish Species
- Riparian Wildlife and Vegetation Reptiles and Amphibians
 - Birds
 - Reptiles and Amphibians
 - Vegetation
 - Ecological Communities
 - Rare, Threatened, or Endangered Riparian Species"

(pp 2-5 NHDES – NHDES Lamprey River Management Plan 8/28/2013:

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/20130829lr-wmp.pdf>)

Also, contrary to what was stated in the Council meeting on the 11th, the Conservation Commission was not unanimous. I alone voted against dam removal.

Sincerely yours,

Coleen Fuerst, President
Durham Boat Company, Inc.
220 Newmarket Rd.
Durham, NH 03824

+1 (603) 659-7575
+1 (603) 659-6565

From: "Harris, Larry" <Larry.Harris@unh.edu>

Date: Thursday, January 14, 2021 at 16:01

To: Jeffrey & Tina Hiller <Jeffreyhiller@comcast.net>, Andrea Bodo <afbodo@comcast.net>, Daniel Day <rbdan@comcast.net>, "peleharrison@yahoo.com" <peleharrison@yahoo.com>, "Polk, Keith" <Keith.Polk@unh.edu>, Scott Letourneau <sletomd@gmail.com>, "Newkirk, Thomas" <Thomas.Newkirk@unh.edu>, Dennis Meadows <latailled@aol.com>, Steve Burns <burns.sk@gmail.com>, Suzanne MacDonald <Sgmac@aol.com>, Susanna Nichols <susannanichols@optonline.net>, Daphne Gowland <daphnegowland@yahoo.com>, "Cataneo, David" <David.Cataneo@unh.edu>, "janzalone@comcast.net" <janzalone@comcast.net>, "England, Richard" <Richard.England@unh.edu>, Chris Gowland <cjgowland@gmail.com>, Phyllis Heilbronner <h.heilbronner@comcast.net>, Greg Sancoff <sancoffg@aol.com>, Beth Olshansky <Beth.Olshansky@comcast.net>, "totographs@alumni.unh.edu" <totographs@comcast.net>, Jim Dreher <jim@durhamboat.com>, "Harris, Ann Marie" <annamie@comcast.net>, "Freedman, Diane" <Diane.Freedman@unh.edu>, Thomas Toyer <tom@arthurthomasproperties.com>, Joshua Meyrowitz <Prof.Joshua.Meyrowitz@gmail.com>, Jim Munsey <munseysports@aol.com>, "Polk, Janet" <Janet.Polk@unh.edu>, Deb Munsey <debmunsey@aol.com>, Janet Mackie <janet.mackie@comcast.net>, Cindy Cooper <csoffencooper@gmail.com>, Sandy & Roger Evans

<evans15@comcast.net>, Doug Worthen <dougworthen@gmail.com>, Suzy Yoder <Sunnysuzy2@yahoo.com>, Coleen Fuerst <cfuerst@durhamboat.com>, Diana Carroll <dianacarrollnh@gmail.com>

Cc: Joan Bigwood <joanbigwood@gmail.com>, Jeff Osborn <jeff@osborncapital.com>

Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Dear Jeffrey,

You do bring up some interesting points and I will try to respond, though it will not be a long one.

The first issue is fish exit and over the dam or down the fish ladder. There is no pool below the dam into which fish can land, especially at lower tide levels so they will land on a rocky ledge system. Is it better to get battered going over the dam or at a right hand turn in the ladder? I still cannot understand why a fish ladder that is not designed to be two-way was installed since most species and their young must exit the pond and river after spawning.

I like your thoughts on the low flow in the fish ladder as potentially preferable to going over the dam at low flow and low tide.

The issue of the upper dam has hardly been addressed. It is 21 ft high so a fish ladder installed there would be a much more substantial undertaking and the same issue of how the fish exit when water demand is high and flow is low during drier periods needs to be answered, especially if they cannot use the fish ladder. Water release from the upper dam is a major determinant of water flow through the pond system and almost certainly impacts oxygen levels when almost no water is being released.

Proponents of dam removal talk about increasing herring runs. Alewives spawn in vegetated edges of ponds while Blue-backed Herring spawn in running water. Removal of the dam is unlikely to leave any habitat for Alewives to spawn so this species is not likely to benefit from dam removal.

Michael Dionne reported that in 1992 the fish run was 157 thousand fish and this spring it was less than 5,000. I would suggest that water flow, as Michael said, and fish ladder closure are synergistic factors responsible for much of this decline. Water demand keeps growing as development continues, which does not bode well for water flow below the water supply dam. It is imperative that this discussion be expanded to include the watershed. It would also be valuable to have some discussion of how restoration is going to occur in a pond and backwater system that is almost a mile long. Lots of issues.

All the best, Larry

From: Jeffrey & Tina Hiller <Jeffreyhiller@comcast.net>

Date: Thursday, January 14, 2021 at 1:15 PM

To: Andrea Bodo <afbodo@comcast.net>, Daniel Day <rbdan@comcast.net>, "peleharrison@yahoo.com" <peleharrison@yahoo.com>, "Polk, Keith" <Keith.Polk@unh.edu>, Scott Letourneau <sletomd@gmail.com>, "Newkirk, Thomas" <Thomas.Newkirk@unh.edu>, Dennis Meadows <latailled@aol.com>, Steve Burns <burns.sk@gmail.com>, Suzanne MacDonald <Sgmac@aol.com>, Susanna Nichols <susannanichols@optonline.net>, Daphne Gowland <daphnegowland@yahoo.com>, "Cataneo, David" <David.Cataneo@unh.edu>, "janzalone@comcast.net" <janzalone@comcast.net>, "England, Richard" <Richard.England@unh.edu>, "Harris, Larry" <Larry.Harris@unh.edu>, Chris Gowland <cjgowland@gmail.com>, Phyllis Heilbronner <h.heilbronner@comcast.net>, Greg Sancoff <sancoffg@aol.com>, Beth Olshansky <Beth.Olshansky@comcast.net>, "totographs@alumni.unh.edu" <totographs@comcast.net>, Jim Dreher <jim@durhamboat.com>, "Harris, Ann Marie" <annamie@comcast.net>, "Freedman, Diane" <Diane.Freedman@unh.edu>, Thomas Toyé <tom@arthurthomasproperties.com>, Joshua Meyrowitz <Prof.Joshua.Meyrowitz@gmail.com>, Jim Munsey <munseysports@aol.com>, "Polk, Janet" <Janet.Polk@unh.edu>, Deb Munsey <debmunsey@aol.com>, Janet Mackie <janet.mackie@comcast.net>, Cindy Cooper <csoffencooper@gmail.com>, Sandy & Roger Evans <evans15@comcast.net>, Doug Worthen <dougworthen@gmail.com>, Suzy Yoder <Sunnysuzy2@yahoo.com>, Coleen Fuerst <cfuerst@durhamboat.com>, Diana Carroll <dianacarrollnh@gmail.com>

Cc: Joan Bigwood <joanbigwood@gmail.com>, Jeff Osborn <jeff@osborncapital.com>

Subject: Re: Fwd: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

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Thx for sharing. Reading this and playing a bit of a devil's advocate, what I here Michael saying (my paraphrasing/summarizing) is it is not that the Mill Pond ladder cannot be used both ways, but that a conscience decision was made not to use it for a downstream solution as the 180 degree turn in it will trash the fish on the way down. And this would not be an issue if/when ladder is installed at the upstream dam because the fish would not need to use the ladder to go back down stream. They would simply go over the top of that dam I guess is the inference. The other inference would be the fish could only go over the top of the Mill Pond dam when there is sufficient water. And it appears sometime there is not due to the controls at the upstream dam. I think that might address, as a devil's advocate, Larry's questions below. Would you agree with that assessment Larry?

That all said, I guess if the upstream dam chokes off the flow to the Mill Pond Dam, thus trapping the fish from going over the top of it to migrate down stream, then I would think in my simple little mind, the water flow down the fish ladder would be of much less velocity and therefore the fish migrating back down stream would be much less prone to getting trashed about, right? Having said that, I would agree with Larry (I think it was Larry!) that suggested why not try using the ladder in both directions when needed. And this would only be needed in a down stream solution when the pond level is too low for the fish to get over it.

I think the bigger question we have to face as the pro-dam/pond preservation crowd is addressing why the fish run numbers have decreased so much. Right or wrong, dam removal folks are going to say removing the dam can only improve that. We can't just say that is not a valid conclusion on their part. I liken it to having to prove our innocence.

In my mind, again playing devil's advocate, we got a way tougher upstream battle than the fish. We have to somehow get hard scientific facts to refute what the dam removal camp has been saying. we have to prove the dam is not the culprit for fish # dwindling, or at least provide enough scientific evidence to raise reasonable doubt. I don't know how to win the argument that the pond itself is unhealthy. I am not a scientist, so I don't know how to prove that one way or the other. I do not see dead fish in it, which I would associate to an unhealthy situation. I don't know how fish decide not to migrate into an unhealthy body of water. Being slightly sarcastic, but would they climb the ladder, get to the pond, say this sucks, bang a you-ee, go over the top of the dam and swim over to the Bellamy? I guess one could also make the argument that while not the healthiest body of water, it still supports a very healthy eco-system for a lot of other creatures, aquatic and land-based. Those would be my thoughts, although thoughts are not going to cut it with the science that is being presented to remove the dam. If we know that we are destroying the Mill Pond eco-system, we need to give the creatures in that eco-system a science based voice, just like they did for the fish and the flora/fauna being harmed by the dam and pond.

I get concerned when town leaders say we have been talking about this for 20 years, its time to make a decision. I personally think we need to buy time, come up with a strategy to recommend alternate solutions to improve the health of the mill pond so we can keep that and the dam. Something like what the land stewardship committee does? Perhaps water stewardship committee? Just like they build and maintain trails, we need folks to do what we can to restore the pond. Perhaps removing

dead trees, managing the other invasive growth on the pond, recommending drawdowns to improve the flow, etc? Bottom line, we need time and we need more than thoughts and prayers!

On 01/14/2021 10:49 AM Andrea Bodo <afbodo@comcast.net> wrote:

From Larry

Begin forwarded message:

From: "Harris, Larry" <Larry.Harris@unh.edu>

Subject: FW: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Date: January 14, 2021 at 10:27:18 AM EST

To: Andrea Bodo <afbodo@comcast.net>

Dear Andrea,

This is correspondence that I had with Todd Selig, which could be shared with the email list. I had to send the email to Michael Dionne twice since I used us versus gov in his address, but the numbers of herring using the fish ladder is predictable given how it has been operated. What a complex mess. All the best, Larry

From: "Harris, Larry" <Larry.Harris@unh.edu>

Date: Wednesday, January 13, 2021 at 11:11 AM

To: "Selig, Todd" <tselig@ci.durham.nh.us>

Cc: Michael Dionne <Michael.A.Dionne@wildlife.nh.us>, April Talon <atalon@ci.durham.nh.us>, Richard Reine <rreine@ci.durham.nh.us>

Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Dear Todd,

Thank you for forwarding the email for Michael Dionne. It is very informative and rather disconcerting too. I am an invertebrate zoologist so my understanding of fish biology and ecology is not a specialty. However, they are important predators of the species I do focus on so I do understand quite a bit. As I said at the hearing, I have observed the early runs when there was lots of obvious spawning activity in both the pond and the running portions of the Oyster River. I have also stood on the fish ladder and watched desperate herring trying to escape when almost no water was going over the spillway and the fish ladder was blocked.

Since most of the species that migrate into freshwater to spawn in New England (both herring species, smelt, salmon, shad) are capable of spawning in more than one year and need to return to salt water after spawning, I cannot fathom why a fish ladder would be installed that supposedly does not allow fish to go both directions. In addition, all those species, and the lampreys and eels, also have young (or adults in the case of eels) that must exit the freshwater and a blocked fish ladder is not going to allow that with low flow. Michael is correct that leaving the fish ladder open would impact water levels, especially since the water supply dam releases so little water during dry periods, but if one wants to find out if the fish can use the ladder to exit, then test it. I have observed herring spawning runs in little creeks in Maine and somehow those fish make it both directions.

Based on how fish runs are managed in the Oyster River, it is not surprising that fish runs are declining.
It is also interesting that the water supply dam is a candidate for the same kind of fish ladder. But how are the fish going to exit after spawning if they can't exit the same kind of fish ladder on the Mill Pond?
All the best, Larry

From: Todd Selig <tselig@ci.durham.nh.us>
Date: Tuesday, January 12, 2021 at 4:05 PM
To: "Harris, Larry" <Larry.Harris@unh.edu>
Subject: FW: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Caution - External Email

Dear Larry,

For your general information.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a : 8 Newmarket Rd., Durham, NH 03824 USA
t : 603.868.5571 | m : 603.817.0720 | w : www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "Dionne, Michael" <Michael.A.Dionne@wildlife.nh.gov>
Date: Tuesday, January 12, 2021 at 1:58 PM
To: Todd Selig <tselig@ci.durham.nh.us>
Cc: April Talon <atalon@ci.durham.nh.us>, Richard Reine <rreine@ci.durham.nh.us>
Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Hi Todd,
Here's a bit more feedback about some of the things I heard last night.

-As I mentioned in the last email we can't operate this Denil fishway as a downstream passage according to USFWS fish passage specialist. Even if we were to operate it this way all the baffles would need to be removed and the fish would be thrashed pretty hard against the wall when then make the 180 degree turn in the fishway on the way down. In addition, with the low in-flow into the Mill Pond impoundment during late

summer, I think the fishway would likely lower the level of the impoundment quite drastically.

-There was some talk about what gains we would even have if the dam were removed with the water supply dam in place. NHFG considers building fish passage at the water supply dam a high priority (regardless of whether or not Mill Pond Dam is removed). We have already had a site visit with USFWS fish passage specialist. They indicated that the site was a great candidate for fish passage with a standard Denil fishway.

-It was mentioned by Larry Harris and another individual that the fishway is not run at Mill Pond Dam. The fishway has been operated each spring since 1976. The river herring run is usually over by the end of June, so the fishway is closed each year by the early part of July. I think the latest date of operation was July 6th. For many years the fishway was operated with an electronic fish counter due to the large fish run there. However, NHFG has been trapping the fish and hand counting each fish every year since '12. Both species of river herring (alewife and blueback herring) are considered a species of concern both state and federally. The severe decline of blueback herring in particular in NH is very concerning for NHFG. The Oyster River herring run was comprised of 100% blueback herring in 2000, now it is closer to a 50/50 mix of both species.

-Peak fish passage occurred in 1992 with 157,024 river herring passed, but has been generally declining since.

-Passage in 2000=70,873

-Passage in 2010=19,006

-Passage in 2020=4,655

-There was a lot of talk about river flow being restricted by the water supply dam. In low flow springs we do have problems operating the fishway. This has been the case the last few years with diminishing flows throughout the spring herring run. This makes it difficult to provide enough flow down the fishway to attract fish. In addition, with water flowing down the fishway, flow over the spillway tends to diminish to near nothing. After spawning the adult herring want to immediately migrate back to the estuary, but cannot drop over the nearly dry spillway. When people see the fish schooling at the dam "struggling" to drop over the spillway I think many believe there is some sort of an issue with the fishway, but that is not the case. Like I mentioned before we cannot operate the fishway for downstream passage, so the fish have to wait for a rain event to raise water enough to drop over the spillway. In addition, we often still have adult fish trying to migrate up to spawn, so have fish going both directions at once.

-Lastly there was a lot of talk about the contaminated sediments. This is more of question for VHB to answer, but I will say I haven't worked on any dam removal that didn't remove/stabilize existing sediments. It will be part of the package no matter what.

If you have any further questions or want something explained better feel free to contact me.

Thanks!

Mike Dionne

Marine Biologist

NH Fish and Game Department

225 Main St. Durham, NH 03824

(603) 868-1095, michael.dionne@wildlife.nh.gov

NH Fish and Game...connecting you to life outdoors

www.wildnh.com< <http://www.wildnh.com/>>, www.facebook.com/nhfishandgame<
<http://www.facebook.com/nhfishandgame#!/nhfishandgame>>

Did you know? New Hampshire Fish and Game has been conserving New Hampshire's wildlife and their habitats since 1865.

From: Todd Selig <tselig@ci.durham.nh.us>

Sent: Tuesday, January 12, 2021 11:13 AM

To: Dionne, Michael

Cc: April Talon; Richard Reine

Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Dear Michael,

Thank you for this feedback. We shall share it with the Council.

Todd

Todd I. Selig<
[https://urldefense.com/v3/https://www.ci.durham.nh.us/administration ;!!Oai6dtTQULp8Sw!FJodZozOom4KCAfhsb4MCvQOtDG074olpHapc875ChlBE1d0j12p8e-MBkTjL8-ErKYLauikJd1n\\$>](https://urldefense.com/v3/https://www.ci.durham.nh.us/administration), Administrator

Town of Durham, NH

a: 8 Newmarket Rd., Durham, NH 03824 USA

t: 603.868.5571 | m: 603.817.0720 | w: www.ci.durham.nh.us<
[https://urldefense.com/v3/http://www.ci.durham.nh.us/ ;!!Oai6dtTQULp8Sw!FJodZozOom4KCAfhsb4MCvQOtDG074olpHapc875ChlBE1d0j12p8e-MBkTjL8-ErKYLanEaKXD_\\$>](https://urldefense.com/v3/http://www.ci.durham.nh.us/)

He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "Dionne, Michael" <Michael.A.Dionne@wildlife.nh.gov>
Date: Monday, January 11, 2021 at 8:33 PM
To: Todd Selig <tselig@ci.durham.nh.us>
Subject: Mill Pond Fishway

Hi Todd,

I just wanted to make a comment about what Larry Harris talked about. I have operated the fishway on Mill Pond for 20+ years. The fishway has been in continuous operation since 1976. It is a Denil design fishway and according to USFWS fish passage specialist cannot be used as a downstream fish passage. It has never been operated as a downstream passage.

Thanks, Mike Dionne

April Talon

From: Todd Selig
Sent: Friday, January 15, 2021 12:15 PM
Cc: April Talon; Richard Reine
Subject: *FW: My additional Comments - feedback from Keith Polk Re: Mill Pond Dam

Dear Members of the Council,

For your information relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "Polk, Keith" <Keith.Polk@unh.edu>
Date: Friday, January 15, 2021 at 11:54 AM
To: "Freedman, Diane" <Diane.Freedman@unh.edu>, Coleen Fuerst <cfuerst@durhamboat.com>
Cc: Larry Harris <Larry.Harris@unh.edu>, Jeffrey & Tina Hiller <Jeffreyhiller@comcast.net>, Daniel Day <rbdan@comcast.net>, Pele Harrison <peleharrison@yahoo.com>, Scott Letourneau <sletomd@gmail.com>, "Newkirk, Thomas" <Thomas.Newkirk@unh.edu>, Dennis Meadows <latailled@aol.com>, Stephen Burns <burns.sk@gmail.com>, "sgmac@aol.com" <Sgmac@aol.com>, Susanna Nichols <susannanichols@optonline.net>, Daphne Gowland <daphnegowland@yahoo.com>, "Cataneo, David" <David.Cataneo@unh.edu>, "janzalone@comcast.net" <janzalone@comcast.net>, "England, Richard" <Richard.England@unh.edu>, Chris Gowland <cjgowland@gmail.com>, "h. heilbronner" <h.heilbronner@comcast.net>, Greg Sancoff <sancoffg@aol.com>, Beth Olshansky <beth.olshansky@comcast.net>, schwartz leslie <totographs@comcast.net>, Annmarie Harris <annamie@comcast.net>, Tom Toye <tom@arthurthomasproperties.com>, Joshua Meyrowitz <prof.joshua.meyrowitz@gmail.com>, Jim Munsey <munseysports@aol.com>, "Polk, Janet" <Janet.Polk@unh.edu>, Deb Munsey <debmunsey@aol.com>, Janet Mackie <janet.mackie@comcast.net>, Cindy Cooper <csoffencooper@gmail.com>, Sandy & Roger Evans <evans15@comcast.net>, Doug Worthen <dougworthen@gmail.com>, Suzanne Loder <Sunnysuzy2@yahoo.com>, Diana Carroll <dianacarrollnh@gmail.com>, Todd Selig <tselig@ci.durham.nh.us>, Joan Bigwood <joanbigwood@gmail.com>, Jeff Osborn <Jeff@osborncapital.com>
Subject: Re: My additional Comments

I am in favor of dam stabilization

The success of the dam removal in Exeter has been a prominent point in the rationale for the removal of the Mill Pond dam in Durham. I would point out, however, that the two dams ultimately experienced quite different histories. In the early years in both towns, their dams, and thus their mill ponds, were central elements. And as the towns developed, especially in the later 19th century, the centers of activity in both moved away from the areas around their dams and pond. But those developments had distinct differences. As Exeter activity moved and centered on the area of Water Street adjacent to what is now known as the Old Town Hall, the area around their Mill Pond rather retreated from view, more or less in the backyards of subsequent development. And, while the dam itself was still visible, a cluster of newer structures arose on both sides of the Mill Pond. In fact, visibly, little of 17th and 18th century Exeter remained.

Development in Durham was obviously quite different, as the shift there did not really begin until the establishment of the university in the town at the end of the nineteenth century. At that point commercial activity soon moved away from the colonial-era center (with the exception of the gas stations and associated activities on Route 108). That is, the heart of colonial Durham remains largely, and uniquely, intact. And, as I have argued in an early comment, central that early center was – and remains, the Mill Pond.

My own experience might serve to emphasize the difference. Soon after I joined the faculty of the music department at UNH, I was asked to serve on an advisory commission considering the future of the music department of the Philips Exeter Academy. That initial contact led to being asked to work with students in my special areas of interest, with the result that for almost forty years I had frequent, often weekly, contacts with students there. I drove into Exeter hundreds of times in those years driving right by, and while I was vaguely aware of the Exeter Mill Pond dam (at that point in the road traffic can be fraught), in fact, if asked about that Mill Pond, my response would be I never once was consciously aware that there was a Mill Pond. The difference with the Durham Mill Pond is of course strikingly different. Thousands of cars drive by the Durham Mill Pond each day. The drivers, of course, don't consciously gawk as they pass, but I imagine that most of those that make the trip often will be shocked by the absence of such a central feature of Durham if the dam should be gone.

As the Town Council members considers the question of dam removal, I would urge that they keep in mind that previous Town Councils have been firmly in favor of maintaining the dam. That is, more than once town councils have felt that the Mill Pond, and its dam, are a precious part of the history of Durham. They also recognized that is also highly valued for its offerings for many residents today – quite literally, for as I write this, I can see several young boys are playing hockey on the Mill Pond. The present and the past currently offer a unique mix in Durham.

Keith Polk
20 Laurel Lane, Durham

From: Freedman, Diane <Diane.Freedman@unh.edu>

Sent: Friday, January 15, 2021 11:52 AM

To: Coleen Fuerst <cfuerst@durhamboat.com>

Cc: Harris, Larry <Larry.Harris@unh.edu>; Jeffrey & Tina Hiller <Jeffreyhiller@comcast.net>; Daniel Day <rbdan@comcast.net>; peleharrison@yahoo.com <peleharrison@yahoo.com>; Polk, Keith <Keith.Polk@unh.edu>; Scott Letourneau <sletomd@gmail.com>; Newkirk, Thomas <Thomas.Newkirk@unh.edu>; Dennis Meadows <lataillede@aol.com>; Steve Burns <burns.sk@gmail.com>; Suzanne MacDonald <Sgmac@aol.com>; Susanna Nichols <susannanichols@optonline.net>; Daphne Gowland <daphnegowland@yahoo.com>; Cataneo, David <David.Cataneo@unh.edu>; janzalone@comcast.net <janzalone@comcast.net>; England, Richard <Richard.England@unh.edu>; Chris Gowland <cjgowland@gmail.com>; Phyllis Heilbronner <h.heilbronner@comcast.net>; Greg Sancoff <sancoff@aol.com>; Beth Olshansky <beth.olshansky@comcast.net>; totographs@alumni.unh.edu <totographs@comcast.net>; Harris, Ann Marie <annamie@comcast.net>; Thomas Toy

<tom@arthurthomasproperties.com>; Joshua Meyrowitz <prof.joshua.meyrowitz@gmail.com>; Jim Munsey <munseysports@aol.com>; Polk, Janet <Janet.Polk@unh.edu>; Deb Munsey <debmunsey@aol.com>; Janet Mackie <janet.mackie@comcast.net>; Cindy Cooper <csoffencooper@gmail.com>; Sandy & Roger Evans <evans15@comcast.net>; Doug Worthen <dougworthen@gmail.com>; Suzy Yoder <Sunnysuzy2@yahoo.com>; Diana Carroll <dianacarrollnh@gmail.com>; Selig, Todd <tselig@ci.durham.nh.us>; Joan Bigwood <joanbigwood@gmail.com>; Jeff Osborn <Jeff@osborncapital.com>

Subject: Re: My additional Comments

Thank you, Colleen, for your detailed information and the rationale you provide for postponing a decision to remove the dam over the oyster River at this. I would urge you, if you have not already done so, to send your letter to the town Council. And I wonder if you are comfortable with it being published on the friends of the Mill Pond Facebook pages (if that's what that collection of letters from the to the town is called?).

I think that the information suggest that the water In the empowerment might be improved by the release upstream of more water As well as Dual direction fish ladders In situations of more flow along in the water system in general? And also that it's possible to ask for that water both for river(ine)

Ecology and those recreational uses that come up (Interesting that skiing skating and snow shoeing aren't mentioned, but they to rely on a certain amount of water (but not so much flow, in the winter, except from those portions of a waterway that don't freeze).

Diane P Freedman

Author of -Midlife with Thoreau: Poems, Essays, Journals-

On Jan 15, 2021, at 10:59 AM, Coleen Fuerst <cfuerst@durhamboat.com> wrote:

Caution - External Email

To All:

I was on the Technical Review Committee (TRC) for the Lamprey River when it was one of two rivers, the Lamprey River, in the State studied by NHDES as models for the designated rivers program. One result was to mitigate extreme drought, by mandating pulses of water that must be released from Pawtuckaway Lake and Mendums Pond at the gage at Packers Falls when translated velocity in cubic feet per second falls to a designated value to protect "flow-dependent" uses.

Since then, a number of rivers have been studied by NHDES and more in the future will be for inclusion as a designated Rivers Program. The Oyster River is on the list of rivers to be studied in the future, according Wayne Ives, NHDES.

I recommend it would be prudent to wait until NHDES studies the Oyster River in detail prior to the vote of Mill Pond Dam, which is both a Low Hazard Dam and a Headwater Dam on the Oyster River. Perhaps after the NHDES study they will recommend a reasonable amount of water be released from the water treatment plant Reservoir without any further depletion on the Lamprey River. This could result in a more habitable spawning areas for anadromous fish with an upgrade to the fish ladder to allow two-way migration. If there is a natural legacy-falls under the dam, as seems likely, because at the Lamprey River that river also has Dam remnants just upstream from the Macallen Dam and high ledge, under the Rt. 108 bridge in Newmarket. If the Macallen Dam had been removed, the fish ladder would have to be removed as well, if is doubtful that any, anadromous fish would get more then 200 meters upstream of

the present location of the dam. These two water sheds are related as they actually cojoin during high flood events.

See what was written a description of the protected entities on the Lamprey River:

“A. Definition of Protected Instream Flows and Identification of Protected Entities

The Instream Flow Pilot Program’s legislatively defined protection goals are to maintain water for instream public uses, protect the resources for which the segment is designated, and to regulate the quantity and quality of instream flow along a designated river to conserve and protect outstanding characteristics. Maintaining the protected instream flows attains the water quality standards for flow quantity. Management of this waterbody, therefore, should be conducted so as to maintain the protected flows.

Specific categories of the instream public uses, outstanding characteristics and resources are described in RSA 483, the New Hampshire Rivers Management and Protection Program. Collectively, the instream public uses, outstanding characteristics and resources are called the “protected entities” in the Instream Flow Program. The protected entities in the Lamprey River watershed include boating; recreation (fishing, swimming); hydropower; public water supply; archaeological resources; the natural riparian corridor ecosystem; rare, threatened, and endangered species; and aquatic flora and fauna.

The processes for defining the protected flows and developing the water management plan are described in administrative rule Chapter Env-Wq 1900 Rules for the Protection of Instream Flow on Designated Rivers, commonly called the Instream Flow Rules. Each of the protected entities identified in statute was studied to determine its relationship to the Lamprey River, and specifically whether the entity was flow dependent. Those entities that were not flow dependent were not studied further.

The Lamprey River’s protected entities were identified and listed as described under the Scope of Work for the Lamprey Instream Flow Pilot Program project (Normandeau Associates, Inc. et al. 2005). The protected entities were verified and assessed for their flow dependence in a report (DES 2006). Only the flow-dependent members of the protected entities were assessed for instream flow protection needs. The determination of whether an identified entity was considered to be flow- dependent was based on biological or physical needs. The list of identified entities includes:

1. Recreation (boating, fishing, and swimming);
2. Maintenance and enhancement of fish and aquatic life (native fish, introduced fish, Anadromous fish, mussels, and insects);
3. Fish and wildlife habitat (fish life stages, floodplains, wetlands, and associated waterbodies);
4. Rare, threatened and endangered species (RTE) (fish, wildlife, vegetation, and natural/ecological communities).

Public water supplies were initially identified as flow dependent because water quality standards contained flow conditions for withdrawals. However, it has since been determined that public water supplies should not have an instream flow determined for them. First, public water supply does not represent an instream public use as defined in statute as an entity requiring a protected instream flow. Second, a defined protected flow specifically for a public water supply would be an allocation of water. An allocation process is not sustainable since any new water system would also require an allocation. Further, there are no flow-related criteria for quantifying such an allocation. Instead, public water supplies will be sustained, as will all other uses, by maintaining the natural variability of flows as defined by the Natural Flow Paradigm.

Flow-dependent protected entities were studied to determine the flow components necessary for their function, as well as any constraints, such as season-specific needs. The detailed delineation, flow needs, discussion, and assessment of each water use/resource is described in the report Instream Public Uses, Outstanding Characteristics, and Resources of the Lamprey River and Proposed Protective Flow Measures for Flow Dependent Resources (DES 2006). In summary, they fell into the following categories:

1. Human Instream Public Uses
 1. Boating
 2. Swimming
 3. Fishing
2. Fish & Aquatic Life
 1. Native Fish

2. Introduced Fish
3. Anadromous and Catadromous Fish
4. Mussels
5. Macroinvertebrates
6. Rare, Threatened, or Endangered Fish Species
3. Riparian Wildlife and Vegetation Reptiles and Amphibians
 1. Birds
 2. Reptiles and Amphibians
 3. Vegetation
 4. Ecological Communities
 5. Rare, Threatened, or Endangered Riparian Species"

(pp 2-5 NHDES – NHDES Lamprey River Management Plan 8/28/2013:

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/20130829lr-wmp.pdf>)

Also, contrary to what was stated in the Council meeting on the 11th, the Conservation Commission was not unanimous. I alone voted against dam removal.

Sincerely yours,

Coleen Fuerst, President
Durham Boat Company, Inc.
 220 Newmarket Rd.
 Durham, NH 03824

+1 (603) 659-7575

+1 (603) 659-6565

From: "Harris, Larry" <Larry.Harris@unh.edu>

Date: Thursday, January 14, 2021 at 16:01

To: Jeffrey & Tina Hiller <Jeffreyhiller@comcast.net>, Andrea Bodo <afbodo@comcast.net>, Daniel Day <rbdan@comcast.net>, "peleharrison@yahoo.com" <peleharrison@yahoo.com>, "Polk, Keith" <Keith.Polk@unh.edu>, Scott Letourneau <sletomd@gmail.com>, "Newkirk, Thomas" <Thomas.Newkirk@unh.edu>, Dennis Meadows <latailled@aol.com>, Steve Burns <burns.sk@gmail.com>, Suzanne MacDonald <Sgmac@aol.com>, Susanna Nichols <susannanichols@optonline.net>, Daphne Gowland <daphnegowland@yahoo.com>, "Cataneo, David" <David.Cataneo@unh.edu>, "janzalone@comcast.net" <janzalone@comcast.net>, "England, Richard" <Richard.England@unh.edu>, Chris Gowland <cjgowland@gmail.com>, Phyllis Heilbronner <h.heilbronner@comcast.net>, Greg Sancoff <sancoffg@aol.com>, Beth Olshansky <Beth.Olshansky@comcast.net>, "totographs@alumni.unh.edu" <totographs@comcast.net>, Jim Dreher <jim@durhamboat.com>, "Harris, Ann Marie" <annamie@comcast.net>, "Freedman, Diane" <Diane.Freedman@unh.edu>, Thomas Toyne <tom@arthurthomasproperties.com>, Joshua Meyrowitz <Prof.Joshua.Meyrowitz@gmail.com>, Jim Munsey <munseysports@aol.com>, "Polk, Janet" <Janet.Polk@unh.edu>, Deb Munsey <debmunsey@aol.com>, Janet Mackie <janet.mackie@comcast.net>, Cindy Cooper <csoffencooper@gmail.com>, Sandy & Roger Evans <evans15@comcast.net>, Doug Worthen <dougworthen@gmail.com>, Suzy Yoder <Sunnysuzy2@yahoo.com>, Coleen Fuerst <cfuerst@durhamboat.com>, Diana Carroll <dianacarrollnh@gmail.com>

Cc: Joan Bigwood <joanbigwood@gmail.com>, Jeff Osborn <jeff@osborncapital.com>

Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Dear Jeffrey,

You do bring up some interesting points and I will try to respond, though it will not be a long one.

The first issue is fish exit and over the dam or down the fish ladder. There is no pool below the dam into which fish can land, especially at lower tide levels so they will land on a rocky ledge system. Is it better to get battered going over the dam or at a right hand turn in the ladder? I still cannot understand why a fish ladder that is not designed to be two-way was installed since most species and their young must exit the pond and river after spawning.

I like your thoughts on the low flow in the fish ladder as potentially preferable to going over the dam at low flow and low tide.

The issue of the upper dam has hardly been addressed. It is 21 ft high so a fish ladder installed there would be a much more substantial undertaking and the same issue of how the fish exit when water demand is high and flow is low during drier periods needs to be answered, especially if they cannot use the fish ladder. Water release from the upper dam is a major determinant of water flow through the pond system and almost certainly impacts oxygen levels when almost no water is being released.

Proponents of dam removal talk about increasing herring runs. Alewives spawn in vegetated edges of ponds while Blue-backed Herring spawn in running water. Removal of the dam is unlikely to leave any habitat for Alewives to spawn so this species is not likely to benefit from dam removal.

Michael Dionne reported that in 1992 the fish run was 157 thousand fish and this spring it was less than 5,000. I would suggest that water flow, as Michael said, and fish ladder closure are synergistic factors responsible for much of this decline. Water demand keeps growing as development continues, which does not bode well for water flow below the water supply dam. It is imperative that this discussion be expanded to include the watershed. It would also be valuable to have some discussion of how restoration is going to occur in a pond and backwater system that is almost a mile long. Lots of issues. All the best, Larry

From: Jeffrey & Tina Hiller <Jeffreyhiller@comcast.net>

Date: Thursday, January 14, 2021 at 1:15 PM

To: Andrea Bodo <afbodo@comcast.net>, Daniel Day <rbdan@comcast.net>, "peleharrison@yahoo.com" <peleharrison@yahoo.com>, "Polk, Keith" <Keith.Polk@unh.edu>, Scott Letourneau <sletomd@gmail.com>, "Newkirk, Thomas" <Thomas.Newkirk@unh.edu>, Dennis Meadows <latailled@aol.com>, Steve Burns <burns.sk@gmail.com>, Suzanne MacDonald <Sgmac@aol.com>, Susanna Nichols <susannanichols@optonline.net>, Daphne Gowland <daphnegowland@yahoo.com>, "Cataneo, David" <David.Cataneo@unh.edu>, "janzalone@comcast.net" <janzalone@comcast.net>, "England, Richard" <Richard.England@unh.edu>, "Harris, Larry" <Larry.Harris@unh.edu>, Chris Gowland <cjgowland@gmail.com>, Phyllis Heilbronner <h.heilbronner@comcast.net>, Greg Sancoff <sancoffg@aol.com>, Beth Olshansky <Beth.Olshansky@comcast.net>, "totographs@alumni.unh.edu" <totographs@comcast.net>, Jim Dreher <jim@durhamboat.com>, "Harris, Ann Marie" <annamie@comcast.net>, "Freedman, Diane" <Diane.Freedman@unh.edu>, Thomas Toye <tom@arthurthomasproperties.com>, Joshua Meyrowitz <Prof.Joshua.Meyrowitz@gmail.com>, Jim Munsey <munseysports@aol.com>, "Polk, Janet" <Janet.Polk@unh.edu>, Deb Munsey <debmunsey@aol.com>, Janet Mackie <janet.mackie@comcast.net>, Cindy Cooper <csoffencooper@gmail.com>, Sandy & Roger Evans <evans15@comcast.net>, Doug Worthen <dougworthen@gmail.com>, Suzy Yoder <Sunnysuzy2@yahoo.com>, Coleen Fuerst <cfuerst@durhamboat.com>, Diana Carroll <dianacarrollnh@gmail.com>

Cc: Joan Bigwood <joanbigwood@gmail.com>, Jeff Osborn <jeff@osborncapital.com>

Subject: Re: Fwd: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Caution - External Email

Thx for sharing. Reading this and playing a bit of a devil's advocate, what I here Michael saying (my paraphrasing/summarizing) is it is not that the Mill Pond ladder cannot be used both ways, but that a conscience decision was made not to use it for a downstream solution as the 180 degree turn in it will trash the fish on the way down. And this would not be an issue if/when ladder is installed at the upstream dam because the fish would not need to use the ladder to go back down stream. They would simply go over the top of that dam I guess is the inference. The other inference would be the fish could only go over the top of the Mill Pond dam when there is sufficient water. And it appears sometime there is not due to the controls at the upstream dam. I think that might address, as a devil's advocate, Larry's questions below. Would you agree with that assessment Larry?

That all said, I guess if the upstream dam chokes off the flow to the Mill Pond Dam, thus trapping the fish from going over the top of it to migrate down stream, then I would think in my simple little mind, the water flow down the fish ladder would be of much less velocity and therefore the fish migrating back down stream would be much less prone to getting trashed about, right? Having said that, I would agree with Larry (I think it was Larry!) that suggested why not try using the ladder in both directions when needed. And this would only be needed in a down stream solution when the pond level is too low for the fish to get over it.

I think the bigger question we have to face as the pro-dam/pond preservation crowd is addressing why the fish run numbers have decreased so much. Right or wrong, dam removal folks are going to say removing the dam can only improve that. We can't just say that is not a valid conclusion on their part. I liken it to having to prove our innocence.

In my mind, again playing devil's advocate, we got a way tougher upstream battle than the fish. We have to somehow get hard scientific facts to refute what the dam removal camp has been saying. we have to prove the dam is not the culprit for fish # dwindling, or at least provide enough scientific evidence to raise reasonable doubt. I don't know how to win the argument that the pond itself is unhealthy. I am not a scientist, so I don't know how to prove that one way or the other. I do not see dead fish in it, which I would associate to an unhealthy situation. I don't know how fish decide not to migrate into an unhealthy body of water. Being slightly sarcastic, but would they climb the ladder, get to the pond, say this sucks, bang a you-ee, go over the top of the dam and swim over to the Bellamy? I guess one could also make the argument that while not the healthiest body of water, it still supports a very healthy eco-system for alot of other creatures, aquatic and land-based. Those would be my thoughts, although thoughts are not going to cut it with the science that is being presented to remove the dam. If we know that we are destroying the Mill Pond eco-system, we need to give the creatures in that eco-system a science based voice, just like they did for the fish and the flora/fauna being harmed by the dam and pond.

I get concerned when town leaders say we have been talking about this for 20 years, its time to make a decision. I personally think we need to buy time, come up with a

strategy to recommend alternate solutions to improve the health of the mill pond so we can keep that and the dam. Something like what the land stewardship committee does? Perhaps water stewardship committee? Just like they build and maintain trails, we need folks to do what we can to restore the pond. Perhaps removing dead trees, managing the other invasive growth on the pond, recommending drawdowns to improve the flow, etc? Bottom line, we need time and we need more than thoughts and prayers!

On 01/14/2021 10:49 AM Andrea Bodo <afbodo@comcast.net> wrote:

From Larry

Begin forwarded message:

From: "Harris, Larry" <Larry.Harris@unh.edu>
Subject: FW: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris
Date: January 14, 2021 at 10:27:18 AM EST
To: Andrea Bodo <afbodo@comcast.net>

Dear Andrea,

This is correspondence that I had with Todd Selig, which could be shared with the email list. I had to send the email to Michael Dionne twice since I used us versus gov in his address, but the numbers of herring using the fish ladder is predictable given how it has been operated. What a complex mess. All the best, Larry

From: "Harris, Larry" <Larry.Harris@unh.edu>
Date: Wednesday, January 13, 2021 at 11:11 AM
To: "Selig, Todd" <tselig@ci.durham.nh.us>
Cc: Michael Dionne <Michael.A.Dionne@wildlife.nh.us>, April Talon <atalon@ci.durham.nh.us>, Richard Reine <rreine@ci.durham.nh.us>
Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Dear Todd,

Thank you for forwarding the email for Michael Dionne. It is very informative and rather disconcerting too. I am an invertebrate zoologist so my understanding of fish biology and ecology is not a specialty. However, they are important predators of the species I do focus on so I do understand quite a bit. As I said at the hearing, I have observed the early runs when there was lots of obvious spawning activity in both the pond and the running portions of the Oyster River. I have also stood on the fish ladder and watched desperate herring trying to escape when almost no water was going over the spillway and the fish ladder was blocked.

Since most of the species that migrate into freshwater to spawn in New England (both herring species, smelt, salmon, shad) are capable of spawning in more than one year and need to return to salt water after spawning, I cannot fathom why a fish ladder would be installed that supposedly does not allow fish to go both directions. In addition, all

those species, and the lampreys and eels, also have young (or adults in the case of eels) that must exit the freshwater and a blocked fish ladder is not going to allow that with low flow. Michael is correct that leaving the fish ladder open would impact water levels, especially since the water supply dam releases so little water during dry periods, but if one wants to find out if the fish can use the ladder to exit, then test it. I have observed herring spawning runs in little creeks in Maine and somehow those fish make it both directions.

Based on how fish runs are managed in the Oyster River, it is not surprising that fish runs are declining.

It is also interesting that the water supply dam is a candidate for the same kind of fish ladder. But how are the fish going to exit after spawning if they can't exit the same kind of fish ladder on the Mill Pond?

All the best, Larry

From: Todd Selig <tselig@ci.durham.nh.us>
Date: Tuesday, January 12, 2021 at 4:05 PM
To: "Harris, Larry" <Larry.Harris@unh.edu>
Subject: FW: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Caution - External Email

Dear Larry,

For your general information.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a : 8 Newmarket Rd., Durham, NH 03824 USA
t : 603.868.5571 | m : 603.817.0720 | w : www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "Dionne, Michael" <Michael.A.Dionne@wildlife.nh.gov>
Date: Tuesday, January 12, 2021 at 1:58 PM
To: Todd Selig <tselig@ci.durham.nh.us>
Cc: April Talon <atalon@ci.durham.nh.us>, Richard Reine <rreine@ci.durham.nh.us>
Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Hi Todd,

Here's a bit more feedback about some of the things I heard last night.

-As I mentioned in the last email we can't operate this Denil fishway as a downstream passage according to USFWS fish passage specialist. Even if we were to operate it this way all the baffles would need to be removed and the fish would be thrashed pretty hard against the wall when then make the 180 degree turn in the fishway on the way down. In addition, with the low in-flow into the Mill Pond impoundment during late summer, I think the fishway would likely lower the level of the impoundment quite drastically.

-There was some talk about what gains we would even have if the dam were removed with the water supply dam in place. NHFG considers building fish passage at the water supply dam a high priority (regardless of whether or not Mill Pond Dam is removed). We have already had a site visit with USFWS fish passage specialist. They indicated that the site was a great candidate for fish passage with a standard Denil fishway.

-It was mentioned by Larry Harris and another individual that the fishway is not run at Mill Pond Dam. The fishway has been operated each spring since 1976. The river herring run is usually over by the end of June, so the fishway is closed each year by the early part of July. I think the latest date of operation was July 6th. For many years the fishway was operated with an electronic fish counter due to the large fish run there. However, NHFG has been trapping the fish and hand counting each fish every year since '12. Both species of river herring (alewife and blueback herring) are considered a species of concern both state and federally. The severe decline of blueback herring in particular in NH is very concerning for NHFG. The Oyster River herring run was comprised of 100% blueback herring in 2000, now it is closer to a 50/50 mix of both species.

-Peak fish passage occurred in 1992 with 157,024 river herring passed, but has been generally declining since.

-Passage in 2000=70,873

-Passage in 2010=19,006

-Passage in 2020=4,655

-There was a lot of talk about river flow being restricted by the water supply dam. In low flow springs we do have problems operating the fishway. This has been the case the last few years with diminishing flows throughout the spring herring run. This makes it difficult to provide enough flow down the fishway to attract fish. In addition, with water flowing down the fishway, flow over the spillway tends to diminish to near nothing. After spawning the adult herring want to immediately migrate back to the estuary, but cannot drop over the nearly dry spillway. When people see the fish schooling at the dam "struggling" to drop over the spillway I think many believe there is some sort of an issue with the fishway, but that is not the case. Like I mentioned before we cannot operate the fishway for downstream passage, so the fish have to wait for a rain event to raise water enough to drop over the spillway. In addition, we often still have adult fish

trying to migrate up to spawn, so have fish going both directions at once.

-Lastly there was a lot of talk about the contaminated sediments. This is more of a question for VHB to answer, but I will say I haven't worked on any dam removal that didn't remove/stabilize existing sediments. It will be part of the package no matter what.

If you have any further questions or want something explained better feel free to contact me.

Thanks!

Mike Dionne

Marine Biologist

NH Fish and Game Department

225 Main St. Durham, NH 03824

(603) 868-1095, michael.dionne@wildlife.nh.gov

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Did you know? New Hampshire Fish and Game has been conserving New Hampshire's wildlife and their habitats since 1865.

From: Todd Selig <tselig@ci.durham.nh.us>

Sent: Tuesday, January 12, 2021 11:13 AM

To: Dionne, Michael

Cc: April Talon; Richard Reine

Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

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Dear Michael,

Thank you for this feedback. We shall share it with the Council.

Todd

Todd I. Selig <[https://urldefense.com/v3/https://www.ci.durham.nh.us/administration;!Oai6dtTQUlp8Sw!FJodZozOom4KCAfhsb4MCvQOtDG074olpHapc875ChlBE1d0j12p8e-MBkTjL8-ErKYLauikJd1n\\$](https://urldefense.com/v3/https://www.ci.durham.nh.us/administration;!Oai6dtTQUlp8Sw!FJodZozOom4KCAfhsb4MCvQOtDG074olpHapc875ChlBE1d0j12p8e-MBkTjL8-ErKYLauikJd1n$)>, Administrator

Town of Durham, NH

a: 8 Newmarket Rd., Durham, NH 03824 USA

t: 603.868.5571 | m: 603.817.0720 | w: www.ci.durham.nh.us <[https://urldefense.com/v3/http://www.ci.durham.nh.us;!Oai6dtTQUlp8Sw!FJodZozOom4KCAfhsb4MCvQOtDG074olpHapc875ChlBE1d0j12p8e-MBkTjL8-ErKYLanEaKXD_\\$](https://urldefense.com/v3/http://www.ci.durham.nh.us;!Oai6dtTQUlp8Sw!FJodZozOom4KCAfhsb4MCvQOtDG074olpHapc875ChlBE1d0j12p8e-MBkTjL8-ErKYLanEaKXD_$)>

He/him/his pronouns

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From: "Dionne, Michael" <Michael.A.Dionne@wildlife.nh.gov>
Date: Monday, January 11, 2021 at 8:33 PM
To: Todd Selig <tselig@ci.durham.nh.us>
Subject: Mill Pond Fishway

Hi Todd,

I just wanted to make a comment about what Larry Harris talked about. I have operated the fishway on Mill Pond for 20+ years. The fishway has been in continuous operation since 1976. It is a Denil design fishway and according to USFWS fish passage specialist cannot be used as a downstream fish passage. It has never been operated as a downstream passage.

Thanks, Mike Dionne

April Talon

From: Dionne, Michael <Michael.A.Dionne@wildlife.nh.gov>
Sent: Sunday, January 17, 2021 10:01 AM
To: external forward for cwelsh; Atwood, Robert
Cc: April Talon
Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Hi Carden,

Thanks for reaching out with more questions. I'll do my best to answer them below.

- What is the change in American eel runs over the last several years? I know there has been an effort by UNH extension to count the returning eels.
*This is probably better answered by Robert.
- Does anyone keep track of sea lamprey runs? How large do you think this run is?
*Yes we count lamprey each year. Typically it's 100-500 lamprey we pass upstream each year.
- Would the river likely regain a rainbow smelt run if the dam is removed?
*This is probably another question better answered by Robert, however I think smelt would respond well to dam removal. They likely will have access to additional habitat with dam removal. Also increased water quality will likely be beneficial to egg survival during incubation.
- Is there any realistic possibility of the river gaining a shad run if the dam is removed?
*Probably not. Shad usually need a larger river system.
- How effective is the current fish ladder, in the opinion of fish and game? What ballpark percentage of river herring (blueback and alewife)/eels (both lamprey and American) get through compared to an open river?
*We have never studied how effective the Oyster fishway is. However, due to its small size it is likely very effective. We would easily see fish below the fishway during our daily visits if any were struggling to ascend it.
- Given the expected drastic decline in depth throughout the prior Mill Pond area if the dam is removed, will the river herring and any other anadromous fish be able to effectively spawn every year? Where would this spawning likely be done in the much shallower waters?
*Since this run was typically dominated by blueback herring it is likely they have always spawned in the more riverine sections upstream of the impoundment. This habitat type may actually increase with dam removal. The biggest advantage to removal is the ability for the juveniles to escape to the estuary more easily.
- Given the expected decline in depth, would dam removal/channel reconstruction help or hurt the number and survival of catadromous fish?
*Robert can speak about eels regarding this. I think my response above covers river herring. Bluebacks are more riverine so should benefit. The small number of alewives that run here should still be able to find stretches of slack water to spawn in.
- Will the fresh water breeding areas, which seem to be mainly in the middle impoundment area, remain if the tidal impact after dam removal grows to the expected 2250 feet?
*River herring will likely spawn upstream of the tide. However, they can successfully spawn in water with low salinity. This is how they survived in low numbers spawning below dams prior to fishway construction.

- Is the Wiswall dam fish ladder the same type as the Mill Pond ladder? If not, what percentage of returning fish make it up the ladder?
*Yes it is a 4' Denil. The extra width makes it more attractive to shad passage on the larger Lamprey river system. The fish few years of operation it passed roughly 25-40 percent of the fish that were counted in Newmarket. We met with USFWS specialists that made some recommendations to improve passage. Since those improvements that fishway passes 90-95 percent of fish that pass Newmarket.
- You mentioned a "migration notch" in the Wiswall Dam that provides better downstream passage for fish. What are the pros and cons from a fisheries perspective? Does it allow for a significant increase in the fish runs? How would it compare, in terms of benefit to the fisheries, with dam removal and channel reconstruction? If such a notch, or other downstream adjustment, were added to the Mill Pond Dam, how much would this likely improve the size of the fish run?
*Yes the notch provides for passage when spill is minimal. We have no idea how much it helps, certainly more in a low flow year. We don't witness fish stuck above that dam very often so it is definitely effective. If the Mill Pond Dam were to stay we would love to see some sort of downstream passage system designed there.
- If we keep the Mill Pond Dam and add a fish ladder to the upstream Oyster River Reservoir Dam, what percentage of fish could likely get through both fish ladders?
*No way to know for sure. We would strive to make it as effective as Wiswall is on the Lamprey.
- Any idea of the likelihood of the Oyster River Reservoir Dam getting a fish ladder, and when?
*We are very early in that process. It has been looked at by USFWS passage specialists and they feel it's a great candidate for passage.
- Any idea of the likelihood of the Oyster River Reservoir dam being removed, and when?
*Who knows, but being a water supply dam it is unlikely unless the Town finds an alternative water supply.

Any other questions feel free to ask.

Mike Dionne
Marine Biologist

NH Fish and Game Department
225 Main St. Durham, NH 03824
(603) 868-1095, michael.dionne@wildlife.nh.gov

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From: Carden Welsh <cardentc2@gmail.com>
Sent: Friday, January 15, 2021 12:50:53 PM
To: Dionne, Michael; Atwood, Robert
Cc: April Talon
Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

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Hi Michael and Robert,
Thanks for your answers to my previous questions. I am attempting to get a better understanding of what dam removal (and channel reconstruction) will do to the runs of anadromous and catadromous fish in the river. What are we most

likely to experience? Hence, could you please take your best shot at answering these questions? I know that you don't have all the answers and may be hesitant to respond without data, but your opinions, as experts are welcome. If you know of a better place to get the answer to any specific question, please advise.

Thank you for all of your time and effort.

Best,

Carden Welsh

Durham Town Council

- What is the change in American eel runs over the last several years? I know there has been an effort by UNH extension to count the returning eels.
- Does anyone keep track of sea lamprey runs? How large do you think this run is?
- Would the river likely regain a rainbow smelt run if the dam is removed?
- Is there any realistic possibility of the river gaining a shad run if the dam is removed?
- How effective is the current fish ladder, in the opinion of fish and game? What ballpark percentage of river herring (blueback and alewife)/eels (both lamprey and American) get through compared to an open river?
- Given the expected drastic decline in depth throughout the prior Mill Pond area if the dam is removed, will the river herring and any other anadromous fish be able to effectively spawn every year? Where would this spawning likely be done in the much shallower waters?
- Given the expected decline in depth, would dam removal/channel reconstruction help or hurt the number and survival of catadromous fish?
- Will the fresh water breeding areas, which seem to be mainly in the middle impoundment area, remain if the tidal impact after dam removal grows to the expected 2250 feet?
- Is the Wiswall dam fish ladder the same type as the Mill Pond ladder? If not, what percentage of returning fish make it up the ladder?
- You mentioned a "migration notch" in the Wiswall Dam that provides better downstream passage for fish. What are the pros and cons from a fisheries perspective? Does it allow for a significant increase in the fish runs? How would it compare, in terms of benefit to the fisheries, with dam removal and channel reconstruction? If such a notch, or other downstream adjustment, were added to the Mill Pond Dam, how much would this likely improve the size of the fish run?
- If we keep the Mill Pond Dam and add a fish ladder to the upstream Oyster River Reservoir Dam, what percentage of fish could likely get through both fish ladders?
- Any idea of the likelihood of the Oyster River Reservoir Dam getting a fish ladder, and when?
- Any idea of the likelihood of the Oyster River Reservoir dam being removed, and when?

On Jan 13, 2021, at 8:43 AM, Dionne, Michael

<Michael.A.Dionne@wildlife.nh.gov<mailto:Michael.A.Dionne@wildlife.nh.gov>> wrote:

Hi Carden,

At Mill Pond dam the only way for fish to get out is to simply drop over the spillway. A little background on the fish there, river herring (which includes both alewives and blueback herring) and sea lamprey are anadromous. That means they spend most of their lives at sea but need to return to freshwater to spawn. When adults return in the spring they usually find a good place to spawn within a week or two and head back to the estuary. This usually isn't a problem in the spring with the higher flows. The young they bear remain in the impoundment growing until late-summer/early-fall then they too drop over the spillway. Since they remain in the impoundment all summer two things are very critical to their success: good water quality resulting in high levels of oxygen and enough flow over the spillway for them to get out when they need/want to.

Sea lamprey also return in the spring to spawn. They build a nest, called a redd, out of small rocks and spawn in pairs. They die after spawning like Pacific salmon. Their young remain in the river/impoundment for 3-7 years before dropping over dam to return to the sea.

American eel are catadromous, meaning they live in freshwater and leave the river to go to sea to spawn. Each spring/summer very small juvenile eels return to the river to grow to adulthood. They aren't strong enough to use the fishway, however are small enough to climb/crawl over any surface that is damp, including land in rare occasions. Adult eels live in freshwater for many years before also dropping over the dam to return to the sea to spawn.

Rainbow smelt are also an anadromous fish, but are very weak swimmers. Smelt do not use the fishway. They usually ride the tide upstream as far as they can to spawn in late-winter/early-spring. Their eggs are very sensitive to poor water quality. Smelt would really stand to benefit from removal of the dam by the increased water quality and it sounds like according to the VHB study an increase in spawning habitat with the tide running upstream of the current dam footprint. Robert can speak to this better than me, but rainbow smelt have really responded well in the Winnicut River in Greenland after a NHFG owned dam was removed there in 2009. It has become one of our most productive rivers for smelt.

If the dam were to stay NHFG would love to see some type of downstream passage provided there. When Durham constructed the fishway at Wiswall Dam back in '11/'12 a downstream migration notch was built on the right side opposite of the fishway. When flows over the spillway are less than 3" boards can be pulled in the migration notch to give downstream passing fish a low spot in the dam to pass through. Another type of downstream passage is provided at the Cocheco Falls Dam in Dover. There is a large pipe cast into the spillway. This pipe has a box connected to it in the impoundment that can be opened to provide passage for fish.

Any further questions feel free to ask!

Mike Dionne

Marine Biologist

NH Fish and Game Department

225 Main St. Durham, NH 03824

(603) 868-1095, michael.dionne@wildlife.nh.gov<<mailto:michael.dionne@wildlife.nh.gov>>

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From: Carden Welsh <cardentc2@gmail.com<mailto:cardentc2@gmail.com>>

Sent: Tuesday, January 12, 2021 3:35 PM

To: Dionne, Michael

Cc: Atwood, Robert

Subject: Fwd: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

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Hi Michael,

Let me introduce myself; I am Carden Welsh and am on the Durham town council and will have to make a decision regarding dam removal. Regarding the ladder, how would the young fish (eels, alewife, herring, lampreys) get back to the ocean? Do they wash over the dam in the spring?

Also, do you know if there are any other species, in addition to those listed above, that use the fish ladder? Someone mentioned rainbow smelt last night.

I have ccd Robert because I met him while counting eels at the "eel ladder" and he also seems knowledgeable about the river and the ladder.

Thanks,

Carden Welsh

Begin forwarded message:

From: Todd Selig <tselig@ci.durham.nh.us<mailto:tselig@ci.durham.nh.us><mailto:tselig@ci.durham.nh.us>>

Subject: FW: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Date: January 12, 2021 at 11:14:09 AM EST

To: Undisclosed recipients;

From: Todd Selig <tselig@ci.durham.nh.us<mailto:tselig@ci.durham.nh.us><mailto:tselig@ci.durham.nh.us>>

Date: Tuesday, January 12, 2021 at 11:13 AM

To: "Dionne, Michael"

<Michael.A.Dionne@wildlife.nh.gov<mailto:Michael.A.Dionne@wildlife.nh.gov><mailto:Michael.A.Dionne@wildlife.nh.gov>>

Cc: April Talon <atalon@ci.durham.nh.us<mailto:atalon@ci.durham.nh.us><mailto:atalon@ci.durham.nh.us>>, Richard Reine <rreine@ci.durham.nh.us<mailto:rreine@ci.durham.nh.us><mailto:rreine@ci.durham.nh.us>>

Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Dear Michael,

Thank you for this feedback. We shall share it with the Council.

Todd

Todd I.

Selig<[https://urldefense.com/v3/__https://www.ci.durham.nh.us/administration__;!!Oai6dtTQULp8Sw!GyR0Ue2e7bu1fu_kLmoYlwnkKEHyiey-9l1D_ib7t2jBRkf85W8CzXdhRwloVugVLw0UoUuIRA_\\$\\$](https://urldefense.com/v3/__https://www.ci.durham.nh.us/administration__;!!Oai6dtTQULp8Sw!GyR0Ue2e7bu1fu_kLmoYlwnkKEHyiey-9l1D_ib7t2jBRkf85W8CzXdhRwloVugVLw0UoUuIRA_$$)>, Administrator Town of Durham, NH

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He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "Dionne, Michael"

Date: Monday, January 11, 2021 at 8:33 PM

To: Todd Selig <tselig@ci.durham.nh.us<mailto:tselig@ci.durham.nh.us><mailto:tselig@ci.durham.nh.us>>

Subject: Mill Pond Fishway

Hi Todd,

I just wanted to make a comment about what Larry Harris talked about. I have operated the fishway on Mill Pond for 20+ years. The fishway has been in continuous operation since 1976. It is a Denil design fishway and according to USFWS fish passage specialist cannot be used as a downstream fish passage. It has never been operated as a downstream passage.

Thanks, Mike Dionne

April Talon

From: Atwood, Robert <Robert.L.Atwood@wildlife.nh.gov>
Sent: Tuesday, January 19, 2021 8:05 AM
To: external forward for cwelsh
Cc: April Talon; Dionne, Michael
Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Hi Carden,

I answered the questions dealing with rainbow smelt and eels.

- What is the change in American eel runs over the last several years? I know there has been an effort by UNH extension to count the returning eels.
*The YOY eels returning to the Oyster River have declined significantly since we started monitoring in 2014. We also count YOY eels at the Lamprey River. The YOY eels at the Lamprey River have not showed the same declining trend seen at the Oyster River and in 2020 the count of YOY eels was in the top 5 largest catches in the 20 year time series.

- Would the river likely regain a rainbow smelt run if the dam is removed?
*This is probably another question better answered by Robert, however I think smelt would respond well to dam removal. They likely will have access to additional habitat with dam removal. Also increased water quality will likely be beneficial to egg survival during incubation. After the dam was removed at the Winnicut River the smelt numbers increased drastically from less than a few dozen to near a thousand. The catch at the Squamscott River was also time series high after the dam removal.

- - Given the expected decline in depth, would dam removal/channel reconstruction help or hurt the number and survival of catadromous fish?
*Robert can speak about eels regarding this. I think my response above covers river herring. Bluebacks are more riverine so should benefit. The small number of alewives that run here should still be able to find stretches of slack water to spawn in. YOY eels and rainbow smelt would benefit from improved water quality.

Let me know if you have any other questions regarding rainbow smelt and eels. Annual reports regarding eels, smelt, and river herring can be found at the following link <https://www.wildlife.state.nh.us/marine/projects.html>

New 2020 reports should be available in the next few months.

Thanks,

Robert

Robert Atwood
Biologist
NH Fish and Game Dept.
225 Main Street
Durham, NH 03824
603-868-1095 (o)

603-868-3305 (fax)

Did you know? New Hampshire Fish and Game has been conserving New Hampshire's wildlife and their habitats since 1865

From: Dionne, Michael
Sent: Sunday, January 17, 2021 10:00 AM
To: Carden Welsh; Atwood, Robert
Cc: April Talon
Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Hi Carden,
Thanks for reaching out with more questions. I'll do my best to answer them below.

- What is the change in American eel runs over the last several years? I know there has been an effort by UNH extension to count the returning eels.
*This is probably better answered by Robert.
- Does anyone keep track of sea lamprey runs? How large do you think this run is?
*Yes we count lamprey each year. Typically it's 100-500 lamprey we pass upstream each year.
- Would the river likely regain a rainbow smelt run if the dam is removed?
*This is probably another question better answered by Robert, however I think smelt would respond well to dam removal. They likely will have access to additional habitat with dam removal. Also increased water quality will likely be beneficial to egg survival during incubation.
- Is there any realistic possibility of the river gaining a shad run if the dam is removed?
*Probably not. Shad usually need a larger river system.
- How effective is the current fish ladder, in the opinion of fish and game? What ballpark percentage of river herring (blueback and alewife)/eels (both lamprey and American) get through compared to an open river?
*We have never studied how effective the Oyster fishway is. However, due to its small size it is likely very effective. We would easily see fish below the fishway during our daily visits if any were struggling to ascend it.
- Given the expected drastic decline in depth throughout the prior Mill Pond area if the dam is removed, will the river herring and any other anadromous fish be able to effectively spawn every year? Where would this spawning likely be done in the much shallower waters?
*Since this run was typically dominated by blueback herring it is likely they have always spawned in the more riverine sections upstream of the impoundment. This habitat type may actually increase with dam removal. The biggest advantage to removal is the ability for the juveniles to escape to the estuary more easily.
- Given the expected decline in depth, would dam removal/channel reconstruction help or hurt the number and survival of catadromous fish?
*Robert can speak about eels regarding this. I think my response above covers river herring. Bluebacks are more riverine so should benefit. The small number of alewives that run here should still be able to find stretches of slack water to spawn in.
- Will the fresh water breeding areas, which seem to be mainly in the middle impoundment area, remain if the tidal impact after dam removal grows to the expected 2250 feet?

*River herring will likely spawn upstream of the tide. However, they can successfully spawn in water with low salinity. This is how they survived in low numbers spawning below dams prior to fishway construction.

- Is the Wiswall dam fish ladder the same type as the Mill Pond ladder? If not, what percentage of returning fish make it up the ladder?

*Yes it is a 4' Denil. The extra width makes it more attractive to shad passage on the larger Lamprey river system. The fish few years of operation it passed roughly 25-40 percent of the fish that were counted in Newmarket. We met with USFWS specialists that made some recommendations to improve passage. Since those improvements that fishway passes 90-95 percent of fish that pass Newmarket.

- You mentioned a "migration notch" in the Wiswall Dam that provides better downstream passage for fish. What are the pros and cons from a fisheries perspective? Does it allow for a significant increase in the fish runs? How would it compare, in terms of benefit to the fisheries, with dam removal and channel reconstruction? If such a notch, or other downstream adjustment, were added to the Mill Pond Dam, how much would this likely improve the size of the fish run?

*Yes the notch provides for passage when spill is minimal. We have no idea how much it helps, certainly more in a low flow year. We don't witness fish stuck above that dam very often so it is definitely effective. If the Mill Pond Dam were to stay we would love to see some sort of downstream passage system designed there.

- If we keep the Mill Pond Dam and add a fish ladder to the upstream Oyster River Reservoir Dam, what percentage of fish could likely get through both fish ladders?

*No way to know for sure. We would strive to make it as effective as Wiswall is on the Lamprey.

- Any idea of the likelihood of the Oyster River Reservoir Dam getting a fish ladder, and when?

*We are very early in that process. It has been looked at by USFWS passage specialists and they feel it's a great candidate for passage.

- Any idea of the likelihood of the Oyster River Reservoir dam being removed, and when?

*Who knows, but being a water supply dam it is unlikely unless the Town finds an alternative water supply.

Any other questions feel free to ask.

Mike Dionne
Marine Biologist

NH Fish and Game Department
225 Main St. Durham, NH 03824
(603) 868-1095, michael.dionne@wildlife.nh.gov

NH Fish and Game...connecting you to life outdoors www.wildnh.com, www.facebook.com/nhfishandgame

Did you know? New Hampshire Fish and Game has been conserving New Hampshire's wildlife and their habitats since 1865.

From: Carden Welsh <cardentc2@gmail.com>

Sent: Friday, January 15, 2021 12:50:53 PM

To: Dionne, Michael; Atwood, Robert

Cc: April Talon

Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Michael and Robert,

Thanks for your answers to my previous questions. I am attempting to get a better understanding of what dam removal (and channel reconstruction) will do to the runs of anadromous and catadromous fish in the river. What are we most likely to experience? Hence, could you please take your best shot at answering these questions? I know that you don't have all the answers and may be hesitant to respond without data, but your opinions, as experts are welcome. If you know of a better place to get the answer to any specific question, please advise.

Thank you for all of your time and effort.

Best,

Carden Welsh

Durham Town Council

- What is the change in American eel runs over the last several years? I know there has been an effort by UNH extension to count the returning eels.
- Does anyone keep track of sea lamprey runs? How large do you think this run is?
- Would the river likely regain a rainbow smelt run if the dam is removed?
- Is there any realistic possibility of the river gaining a shad run if the dam is removed?
- How effective is the current fish ladder, in the opinion of fish and game? What ballpark percentage of river herring (blueback and alewife)/eels (both lamprey and American) get through compared to an open river?
- Given the expected drastic decline in depth throughout the prior Mill Pond area if the dam is removed, will the river herring and any other anadromous fish be able to effectively spawn every year? Where would this spawning likely be done in the much shallower waters?
- Given the expected decline in depth, would dam removal/channel reconstruction help or hurt the number and survival of catadromous fish?
- Will the fresh water breeding areas, which seem to be mainly in the middle impoundment area, remain if the tidal impact after dam removal grows to the expected 2250 feet?
- Is the Wiswall dam fish ladder the same type as the Mill Pond ladder? If not, what percentage of returning fish make it up the ladder?
- You mentioned a "migration notch" in the Wiswall Dam that provides better downstream passage for fish. What are the pros and cons from a fisheries perspective? Does it allow for a significant increase in the fish runs? How would it compare, in terms of benefit to the fisheries, with dam removal and channel reconstruction? If such a notch, or other downstream adjustment, were added to the Mill Pond Dam, how much would this likely improve the size of the fish run?
- If we keep the Mill Pond Dam and add a fish ladder to the upstream Oyster River Reservoir Dam, what percentage of fish could likely get through both fish ladders?
- Any idea of the likelihood of the Oyster River Reservoir Dam getting a fish ladder, and when?
- Any idea of the likelihood of the Oyster River Reservoir dam being removed, and when?

On Jan 13, 2021, at 8:43 AM, Dionne, Michael

<Michael.A.Dionne@wildlife.nh.govmailto:Michael.A.Dionne@wildlife.nh.gov>> wrote:

Hi Carden,

At Mill Pond dam the only way for fish to get out is to simply drop over the spillway. A little background on the fish there, river herring (which includes both alewives and blueback herring) and sea lamprey are anadromous. That means they spend most of their lives at sea but need to return to freshwater to spawn. When adults return in the spring they usually find a good place to spawn within a week or two and head back to the estuary. This usually isn't a problem in the spring with the higher flows. The young they bear remain in the impoundment growing until late-summer/early-fall then they too drop over the spillway. Since they remain in the impoundment all summer two things are very critical to their success: good water quality resulting in high levels of oxygen and enough flow over the spillway for them to get out when they need/want to.

Sea lamprey also return in the spring to spawn. They build a nest, called a redd, out of small rocks and spawn in pairs. They die after spawning like Pacific salmon. Their young remain in the river/impoundment for 3-7 years before dropping over dam to return to the sea.

American eel are catadromous, meaning they live in freshwater and leave the river to go to sea to spawn. Each spring/summer very small juvenile eels return to the river to grow to adulthood. They aren't strong enough to use the fishway, however are small enough to climb/crawl over any surface that is damp, including land in rare occasions. Adult eels live in freshwater for many years before also dropping over the dam to return to the sea to spawn.

Rainbow smelt are also an anadromous fish, but are very weak swimmers. Smelt do not use the fishway. They usually ride the tide upstream as far as they can to spawn in late-winter/early-spring. Their eggs are very sensitive to poor water quality. Smelt would really stand to benefit from removal of the dam by the increased water quality and it sounds like according to the VHB study an increase in spawning habitat with the tide running upstream of the current dam footprint. Robert can speak to this better than me, but rainbow smelt have really responded well in the Winnicut River in Greenland after a NHFG owned dam was removed there in 2009. It has become one of our most productive rivers for smelt.

If the dam were to stay NHFG would love to see some type of downstream passage provided there. When Durham constructed the fishway at Wiswall Dam back in '11/'12 a downstream migration notch was built on the right side opposite of the fishway. When flows over the spillway are less than 3" boards can be pulled in the migration notch to give downstream passing fish a low spot in the dam to pass through. Another type of downstream passage is provided at the Cocheco Falls Dam in Dover. There is a large pipe cast into the spillway. This pipe has a box connected to it in the impoundment that can be opened to provide passage for fish.

Any further questions feel free to ask!

Mike Dionne

Marine Biologist

NH Fish and Game Department

225 Main St. Durham, NH 03824

(603) 868-1095, michael.dionne@wildlife.nh.gov<mailto:michael.dionne@wildlife.nh.gov>

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www.wildnh.com<https://urldefense.com/v3/__http://www.wildnh.com__;!!Oai6dtTQULp8Sw!EJ0vUjA88jNA9M8VKosi9s3KkpzWz6eYgfe8Q7pYZ3my6i5BjKG5DTbFnTGSlvGefb_SwH54emWK\$><http://www.wildnh.com/<https://urldefense.com/v3/__http://www.wildnh.com/__;!!Oai6dtTQULp8Sw!EJ0vUjA88jNA9M8VKosi9s3KkpzWz6eYgfe8Q7pYZ3my6i5BjKG5DTbFnTGSlvGefb_SwJa2bekS\$>>,
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Did you know? New Hampshire Fish and Game has been conserving New Hampshire's wildlife and their habitats since 1865.

From: Carden Welsh <cardentc2@gmail.com<mailto:cardentc2@gmail.com>>
Sent: Tuesday, January 12, 2021 3:35 PM
To: Dionne, Michael
Cc: Atwood, Robert
Subject: Fwd: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Michael,

Let me introduce myself; I am Carden Welsh and am on the Durham town council and will have to make a decision regarding dam removal. Regarding the ladder, how would the young fish (eels, alewife, herring, lampreys) get back to the ocean? Do they wash over the dam in the spring?

Also, do you know if there are any other species, in addition to those listed above, that use the fish ladder? Someone mentioned rainbow smelt last night.

I have ccd Robert because I met him while counting eels at the "eel ladder" and he also seems knowledgeable about the river and the ladder.

Thanks,

Carden Welsh

Begin forwarded message:

From: Todd Selig <tselig@ci.durham.nh.us<mailto:tselig@ci.durham.nh.us><mailto:tselig@ci.durham.nh.us>>

Subject: FW: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris
Date: January 12, 2021 at 11:14:09 AM EST
To: Undisclosed recipients;

From: Todd Selig <tselig@ci.durham.nh.us<mailto:tselig@ci.durham.nh.us><mailto:tselig@ci.durham.nh.us>>
Date: Tuesday, January 12, 2021 at 11:13 AM
To: "Dionne, Michael"
<Michael.A.Dionne@wildlife.nh.gov<mailto:Michael.A.Dionne@wildlife.nh.gov><mailto:Michael.A.Dionne@wildlife.nh.gov>>
ov>>
Cc: April Talon <atalon@ci.durham.nh.us<mailto:atalon@ci.durham.nh.us><mailto:atalon@ci.durham.nh.us>>, Richard
Reine <rreine@ci.durham.nh.us<mailto:rreine@ci.durham.nh.us><mailto:rreine@ci.durham.nh.us>>
Subject: Re: Mill Pond Fishway - an email from Michael Dionne responding to statement from Larry Harris

Dear Michael,

Thank you for this feedback. We shall share it with the Council.

Todd

Todd I.

Selig<[https://urldefense.com/v3/__https://www.ci.durham.nh.us/administration__;!!Oai6dtTQULp8Sw!GyR0Ue2e7bu1fu_kLmOlYlwnkKEHyiey-9l1D_ib7t2jBRkf85W8CzXdhRwloVugVLw0UoUulRA_\\$\\$](https://urldefense.com/v3/__https://www.ci.durham.nh.us/administration__;!!Oai6dtTQULp8Sw!GyR0Ue2e7bu1fu_kLmOlYlwnkKEHyiey-9l1D_ib7t2jBRkf85W8CzXdhRwloVugVLw0UoUulRA_$$)>, Administrator Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | m: 603.817.0720 | w:
www.ci.durham.nh.us<[https://urldefense.com/v3/__http://www.ci.durham.nh.us/__;!!Oai6dtTQULp8Sw!GyR0Ue2e7bu1fu_kLmOlYlwnkKEHyiey-9l1D_ib7t2jBRkf85W8CzXdhRwloVugVLw0UmAOHaFm\\$>](https://urldefense.com/v3/__http://www.ci.durham.nh.us__;!!Oai6dtTQULp8Sw!EJ0vUjA88jNA9M8VKosi9s3KkpzWz6eYgfe8Q7pYZ3my6i5BjKG5DTbFnTGSlvGefb_SwKv13EiU$><https://urldefense.com/v3/__http://www.ci.durham.nh.us/__;!!Oai6dtTQULp8Sw!GyR0Ue2e7bu1fu_kLmOlYlwnkKEHyiey-9l1D_ib7t2jBRkf85W8CzXdhRwloVugVLw0UmAOHaFm$>)>
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "Dionne, Michael"
Date: Monday, January 11, 2021 at 8:33 PM
To: Todd Selig <tselig@ci.durham.nh.us<mailto:tselig@ci.durham.nh.us><mailto:tselig@ci.durham.nh.us>>
Subject: Mill Pond Fishway

Hi Todd,

I just wanted to make a comment about what Larry Harris talked about. I have operated the fishway on Mill Pond for 20+ years. The fishway has been in continuous operation since 1976. It is a Denil design fishway and according to USFWS fish passage specialist cannot be used as a downstream fish passage. It has never been operated as a downstream passage.

Thanks, Mike Dionne

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 9:14 AM
To: April Talon; Richard Reine
Subject: FW: Mill Pond Dam - Zadi Hale

Dear April and Rich,

Please include in the file concerning the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "kittyfmarple@gmail.com" <kittyfmarple@gmail.com>
Date: Monday, January 18, 2021 at 5:31 PM
To: Zadi Hale <zadijunefrog@gmail.com>
Cc: Durham Town Council <council@ci.durham.nh.us>, "Hale, Erin" <Erin.Hale@unh.edu>, Iago Hale <iago.hale@unh.edu>
Subject: Re: Mill Pond Dam
Resent-From: <council@ci.durham.nh.us>

Hi Zadi!

Thank you for this thoughtful note regarding the dam. We will keep your remarks in mind as we discuss the future of the Oyster River.

Kitty Marple

On Jan 18, 2021, at 4:45 PM, Zadi Hale <zadijunefrog@gmail.com> wrote:

Dear Town Council,

My name is Zadi and I am ten years old. I think that the Mill Pond Dam should be removed for various reasons. One main reason is the poor water quality. Because the water is unhealthy, there are not many animals living in the pond. Removing the dam would improve the water quality, which would increase the number of animals living there.

I live at 74 Mill Rd, right next to the Oyster river. There are always lots of animals in the river: fish, frogs, the occasional muskrat, and sometimes even heron! I would like other people who don't live near the river to be able to enjoy these animals as well. By removing the dam and creating a river in the center of town, other people might also get to see those animals. I watched the public hearing, so I know that some people are concerned about a loss of recreation if the dam were to be removed. I do not, however, think that that would be the case. I actually think that removing the dam would provide for entirely new things that people could try. For example, people could kayak or canoe down much more of the river if the dam wasn't there as a barrier.

Sincerely, Zadi Hale

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 9:46 AM
Cc: April Talon; Richard Reine
Subject: FW: feedback from Jay Connor about the Mill Pond Dam
Attachments: message.wav

Dear Members of the Council,

Long-time resident Jay Connor left me a voicemail this morning to call him regarding the dam after he read about it in today's Foster's Daily Democrat at the Irving gas station, which I did. He conveyed the following, which I have summarized below:

- Jay moved to Durham in 1953 with his family and grew up on the pond;
- He had a boat with a motor and kept it at the Colonel's house;
- He fished above and below the dam extensively growing up;
- Prefers to repair the dam and keep the pond;
- The dam and the pond have been an important part of his life;
- People can skate on the pond in winter;
- Whatever the Council decides (repair v. removal-channel restoration), it must ensure is done really well.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

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April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 10:47 AM
To: April Talon; Richard Reine
Subject: FW: Letter in support of preserving the Oyster River Mill Pond Dam - Eliga Gould

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Tuesday, January 19, 2021 at 10:45 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Letter in support of preserving the Oyster River Mill Pond Dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Gould, Eliga [mailto:Eliga.Gould@unh.edu]
Sent: Monday, January 18, 2021 5:21 PM
To: Jen Berry
Subject: Letter in support of preserving the Oyster River Mill Pond Dam

Good Afternoon,

I am writing to voice my strong support for preserving the Oyster River Mill Pond Dam.

In its letter of January 8, 2021, the Durham Historic District Commission makes a strong case for preserving the dam. Although the dam is obviously not part of the original landscape and current dam only dates to 1913, it is one of the town's oldest, most important landmarks. There has been a dam on the site since 1649, which means the pond is nearly 400 years old. For traffic coming from the south, the dam makes for a beautiful entrance to central Durham, and it enhances the parkland that surrounds it. The Historic Commission's letter is eloquent on these and other points. All, it seems to me, weigh heavily in favor of preserving the dam, including, if necessary, committing funds to restore it.

In addition to the Commission's points, I think it's important to note that removing the dam will not, in fact, restore the ecology of the mill pond to its pre-1649 condition. With almost 400 years of silt and sediment, the pond's bed has a fundamentally different topography and soil content from the stream bed that existed before the first dam was erected. Removing the dam will not restore the old eco-system but will instead create a new, third eco-system, one fundamentally different from the eco-system that the pond currently supports, and from the eco-system that the pond replaced. Anyone who has seen the bed of a drained millpond, including ponds drained years or even decades ago, will know exactly what I mean. The proponents of removal may claim that taking out the dam will restore the pond to its original condition. In fact, to remove the dam is to engage in a project of environmental engineering that will be far more ecologically disruptive than working to preserve the dam in its current state.

If the council has questions or would like to discuss any part of this letter further, I would be happy to do so. Please feel free to contact me.

Sincerely yours,

Eliga Gould

Eliga Gould
3 Meader Lane
Durham, NH 03824

(603) 498-7340 (cell)

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 10:48 AM
To: April Talon; Richard Reine
Subject: FW: Mill Pond Dam - Joan Glutting

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Tuesday, January 19, 2021 at 10:44 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Mill Pond Dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

-----Original Message-----

From: Joan Glutting [<mailto:glutdorf@yahoo.com>]
Sent: Tuesday, January 19, 2021 8:22 AM
To: Jen Berry
Subject: Mill Pond Dam

Hello,

I am writing in support of the restoration and maintenance of the mill pond dam. The river and pond are a central part of the town and local ecosystem and deserve to be preserved. Removing the dam will fundamentally change the town and I oppose removing the dam.

Sincerely,

Joan Glutting

Sent from my iPhone

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 10:54 AM
To: April Talon; Richard Reine
Cc: Michael Behrendt
Subject: FW: Letter - Oyster River Dam at Mill Pond - Katherine Duderstadt
Attachments: Letter_Oyster-River-Dam_Duderstadt.docx

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Tuesday, January 19, 2021 at 10:47 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Letter - Oyster River Dam at Mill Pond

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Katharine Duderstadt [mailto:duderstadtk@gmail.com]
Sent: Sunday, January 17, 2021 1:16 PM

To: Jen Berry

Subject: Letter - Oyster River Dam at Mill Pond

Dear Jennie Berry,

Attached are written comments as a Durham resident regarding the deliberations over the future of the Oyster River Dam at Mill Pond. Please forward to the appropriate town council members or administrator for consideration.

Thank you and best regards,

Kathy

Katharine Duderstadt
7 Beards Landing
Durham, NH

Katharine A. Duderstadt
7 Beards Landing
Durham, NH 03824
603-397-5398
duderstadtk@gmail.com

Durham Town Council and Commissions
Administrator's Office
8 Newmarket Road
Durham, New Hampshire 03824

January 17, 2021

Dear Members of the Durham Town Council and Commissions:

I am writing in support of ***dredging Mill Pond and removing the Oyster River Dam at Mill Pond*** following the public input at the May 11th Town Council meeting and reading the publicly available documents from the feasibility study.

The arguments for the environmental benefits are extraordinarily convincing, including to ecosystems within the river and Great Bay. That said, the stories of the personal histories associated with Mill Pond and concerns of homeowners around the pond are also moving. As the town moves forward to dredge the pond and remove the dam, ***it is important that the Town Council and Commissions help provide ways for past and current residents to say goodbye and preserve memories.***

The public comments reveal great interest in keeping the dam because of the historical symbolism of Durham as a colonial mill town. On a personal note, I was surprised to hear during the meeting that my (great-great-great-great-great-great-great-great) grandfather, Thomas Beard, helped build the first dam and mill along with Valentine Hill at the Oyster River Falls in 1649. ***Having recognized that I am a direct descendent of one of first European settlers to halt the natural flow of the Oyster River after 11,000 of stewardship by Abenaki tribes, I now feel the responsibility to speak up and advocate for the removal of the Oyster River Dam***, not only to improve our environment but also as part of the reconciliation and reparations with the People of the Dawnland and the lands on which they lived. History is generally best expressed through archives, museums, monuments, diaries, personal narratives, stories, poems, and paintings...not by retaining the aging infrastructure itself. While old technologies such as dams, coal mines, smelting works, abandoned settlements, and retired power plants are fascinating to visit, when the historical technology is no longer of use and serves only as an environmental hazard disfiguring the landscape, it is time to remove it and find an alternative place to remember the past technological advances and cultural legacy. This is the case with the Oyster River Dam.

The discussion of the UNH dam upstream is also an excellent point. When the time comes for UNH to deliberate removing or modifying its dam, it will be crucial that no barriers downstream hinder the decision. Removing the Oyster River Dam is clearly a first step toward addressing the impacts of the UNH dam and other concerns upstream. Furthermore, ***with projections of 2 meters of sea level rise by 2100, it is imperative that we take every opportunity today to prepare our shorelines to adapt with minimal disturbance to our children and grandchildren.***

My greatest concern is that centuries of an impounded river have led to toxic sediment. ***It is unclear why town residents would even entertain removing or repairing the dam without first addressing these toxic materials currently in our waters,*** whether dredging or by other means. If we can't afford to clean up our waters, why are we even talking about restoring or removing a dam? Cleaning our waters should be top priority, given their importance not only to our environment but also our health.

It is also clear that residents around Mill Pond are not equipped with a shared, positive vision of how the river and pond will transform. A gentle rapids on a stream (reminiscent of the original "Oyster River Falls") would be much more welcoming to residents and visitors of Durham than an large concrete dam sequestering a stagnant algae-covered pond, no matter how technologically innovative it was at the time it was built. However the visions expressed during public comment instead conjure up images of toxic, mosquito-ridden mudflats. When the Oyster River Dam is removed, it will be important to remind residents of the various stages as the river and wetlands transform and to provide resources to address pests, invasive species, and other nuisances during the process. The concerns of the residents mirror frustrations in our own neighborhood when the dam on Route 108 at Beards Creek was lowered. The lowering of the dam dramatically reduced water levels, initially creating months of frustration from mud, stench, mosquitoes, and disappearing wildlife. However, after only a couple years, these wetlands are now very beautiful and filled with wildlife, and we have found recreational alternatives to the occasional skate on the ice. There are also dramatically fewer bugs and mosquitoes given the thriving chorus of frogs.

As a resident of Durham with colonial ancestral ties to the Oyster River dating back to the 1600s, I advocate that it is time to clean up the pond, remove the dam, and restore our relationship with the Oyster River and surrounding wetlands.

Respectfully,

Katharine A. Duderstadt
(Descendent of the Beard and Bramhall families of Durham/Dover)
7 Beards Landing
Durham, New Hampshire

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 10:55 AM
To: April Talon; Richard Reine
Subject: FW: Durham's Mill Pond Dam - Chip Noon

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Tuesday, January 19, 2021 at 10:50 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Durham's Mill Pond Dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Chip Noon [mailto:chipnoon@gmail.com]
Sent: Friday, January 15, 2021 2:21 PM

To: Jen Berry

Subject: Durham's Mill Pond Dam

I have read and listened to reports about the dam, both pro removal and con. I am writing in support of keeping the dam. While there may be some benefits to removal, in my opinion, the history, tradition, and simple pleasure the dam brings to our town is overwhelming. Once the algae problem is solved and the swans come back, it will again be the perfect attraction in a town that is the perfect embodiment of small-town America. Please keep the dam.

Chip Noon

9 Littlehale Rd, Durham, NH 03824

603-866-1121

chipnoon@gmail.com

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 10:56 AM
To: April Talon; Richard Reine
Subject: FW: removal or stabilization: Exeter vs. Durham - Keith Polk

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Tuesday, January 19, 2021 at 10:51 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "kittyfmarple@comcast.net" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: removal or stabilization: Exeter vs. Durham

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Polk, Keith [mailto:Keith.Polk@unh.edu]
Sent: Friday, January 15, 2021 11:52 AM

To: Jen Berry

Subject: removal or stabilization: Exeter vs. Durham

I am in favor of dam stabilization

The success of the dam removal in Exeter has been a prominent point in the rationale for the removal of the Mill Pond dam in Durham. I would point out, however, that the two dams ultimately experienced quite different histories. In the early years in both towns, their dams, and thus their mill ponds, were central elements. And as the towns developed, especially in the later 19th century, the centers of activity in both moved away from the areas around their dams and pond. But those developments had distinct differences. As Exeter activity moved and centered on the area of Water Street adjacent to what is now known as the Old Town Hall, the area around their Mill Pond rather retreated from view, more or less in the backyards of subsequent development. And, while the dam itself was still visible, a cluster of newer structures arose on both sides of the Mill Pond. In fact, visibly, little of 17th and 18th century Exeter remained.

Development in Durham was obviously quite different, as the shift there did not really begin until the establishment of the university in the town at the end of the nineteenth century. At that point commercial activity soon moved away from the colonial-era center (with the exception of the gas stations and associated activities on Route 108). That is, the heart of colonial Durham remains largely, and uniquely, intact. And, as I have argued in an early comment, central that early center was – and remains, the Mill Pond.

My own experience might serve to emphasize the difference. Soon after I joined the faculty of the music department at UNH, I was asked to serve on an advisory commission considering the future of the music department of the Philips Exeter Academy. That initial contact led to being asked to work with students in my special areas of interest, with the result that for almost forty years I had frequent, often weekly, contacts with students there. I drove into Exeter hundreds of times in those years driving right by, and while I was vaguely aware of the Exeter Mill Pond dam (at that point in the road traffic can be fraught), in fact, if asked about that Mill Pond, my response would be I never once was consciously aware that there was a Mill Pond. The difference with the Durham Mill Pond is of course strikingly different. Thousands of cars drive by the Durham Mill Pond each day. The drivers, of course, don't consciously gawk as they pass, but I imagine that most of those that make the trip often will be shocked by the absence of such a central feature of Durham if the dam should be gone.

As the Town Council members considers the question of dam removal, I would urge that they keep in mind that previous Town Councils have been firmly in favor of maintaining the dam. That is, more than once town councils have felt that the Mill Pond, and its dam, are a precious part of the history of Durham. They also recognized that is also highly valued for its offerings for many residents today – quite literally, for as I write this, I can see several young boys are playing hockey on the Mill Pond. The present and the past currently offer a unique mix in Durham.

Keith Polk

20 Laurel Lane, Durham

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 10:57 AM
To: April Talon; Richard Reine
Subject: FW: Mill Pond Dam - Tom Palmer

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Tuesday, January 19, 2021 at 10:56 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Mill Pond Dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: TW Palmer [mailto:thepalmerfamily@me.com]
Sent: Wednesday, January 13, 2021 2:13 PM
To: Jen Berry
Subject: Mill Pond Dam

Good afternoon, Ms. Berry.

A friend reached out to inform me of the ongoing discussion with regard to the historic pond and dam in town and suggested some degree of urgency with respect to that issue today. I am a resident of Durham and am in favor of the town's further examination of maintaining and sustaining the dam and the pond with an eye toward the preservation of both.

Many thanks for your consideration.

Tom Palmer
10 Deer Meadow Rd

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 11:05 AM
To: April Talon; Richard Reine
Subject: FW: In favor of restoring the Mill Pond Dam - Michael and Beth Hawley

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Tuesday, January 19, 2021 at 10:58 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: In favor of restoring the Mill Pond Dam

Dear Councilors,

For your information.

Jennie-

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Michael Hawley [mailto:hawleymichael@gmail.com]
Sent: Wednesday, January 13, 2021 9:32 AM
To: Jen Berry
Subject: In favor of restoring the Mill Pond Dam

Hi,

I live in Durham, residing at 3 Sandy Brook Dr. I was recently made aware of a vote to decide what to do with the Mill Pond Dam.

I am strongly in favor of keeping (restoring) the dam. I drive by the dam every day and for me it is part of the visual identity of Durham and something that I value. Additionally, I use the pond for recreation and would hate to see that go. I can imagine removal of the dam would leave the whole area very swampy as there are probably not enough feeder rivers to support a strong flowing current if the dam was removed. Lastly, I do wonder about the environmental impacts to the bay a change of dam setup would cause.

I am not a structural engineering expert, and not sure all the considerations for restoring the dam. But, I wanted to add my name to the voices requesting to find a way to keep it.

Best,
Michael & Beth Hawley
3 Sandy Brook Dr
Durham, NH 03824

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 11:26 AM
To: bill.lovejoy@comcast.net
Cc: April Talon; Richard Reine; Michael Behrendt
Subject: Re: Mill Pond Dam Removal and the Oyster River - Bill Lovejoy

Dear Bill,

Thank you very much for your email relative to the Mill Pond Dam on the Oyster River. I know the members of the Council will appreciate it as they work to decide next steps.

All my very best,

Todd

Todd I. Selig, Administrator
Town of Durham, NH
[a](mailto:bill.lovejoy@comcast.net): 8 Newmarket Rd., Durham, NH 03824 USA
[t](tel:603.868.5571): 603.868.5571 | [m](tel:603.817.0720): 603.817.0720 | [w](http://www.ci.durham.nh.us): www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "bill.lovejoy@comcast.net" <bill.lovejoy@comcast.net>
Date: Saturday, January 16, 2021 at 10:22 AM
To: Durham Town Council <council@ci.durham.nh.us>
Subject: Mill Pond Dam Removal and the Oyster River
Resent-From: <council@ci.durham.nh.us>

To the Town Council,

As a Durham taxpayer and fisherman for 50+ years (my father got me fishing at 4), I want to advocate for removing the Mill Pond Dam.

Simply put, removing the dam is:

- Good for Durham taxpayers
- Good for the fisheries and wildlife
- And, good for boaters

It is the right thing to do for both the environment and our taxpayers. I appreciate your consideration and do hope we take advantage of this opportunity to remove the Mill Pond Dam and restore the natural flow of the Oyster River.

Thank you,
Bill

Bill Lovejoy
56 Stagecoach Rd.
Durham, NH 03824
603-793-3176

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 11:30 AM
To: Nancy Webb
Cc: April Talon; Richard Reine
Subject: Re: The issue of the dam - Nancy Webb

Dear Nancy,

Thank you very much for your email concerning the future of the Mill Pond Dam on the Oyster River. I know the members of the Town Council will appreciate it.

All my very best,

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Nancy Webb <nancywebb@comcast.net>
Date: Friday, January 15, 2021 at 5:46 PM
To: Todd Selig <tselig@ci.durham.nh.us>
Subject: The issue of the dam

Dear Todd

I strongly support the Mill Pond Dam Stabilization. Please count my vote.

Thank you, Nancy Webb

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 3:02 PM
To: April Talon; Richard Reine
Subject: FW: Oyster River Dam - Cathy Chamberlin Foutz

Dear April and Rich,

Please include with the correspondence relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Tuesday, January 19, 2021 at 2:13 PM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Oyster River Dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Catharine C. Foutz [mailto:cfoutz@pfclaw.com]
Sent: Tuesday, January 19, 2021 2:13 PM
To: Jen Berry
Subject: Oyster River Dam

Hello Town Council –

I have read with great interest the debate over removal or repair of the Oyster River Dam – and I apologize for the lateness of this comment. I wholeheartedly concur with Andrea Bode and Dennis Meadow, whom I know live on the Pond and would be significantly affected if the Dam is removed – thus I will give only a sentimental viewpoint here, but which IS significant for a town so rich in history as Durham is.

I am Cathy Chamberlin Foutz, the youngest child of James and Nell Chamberlin, of the Turn O’ The Road property - bordering the Mill Pond and the river. It became known as the Mill Pond Center, and is now lovingly owned by the Toye family. Although I grew up in that house, I moved to Vermont over 35 years ago; my brothers live in Ohio and Colorado – but we visit Durham often. Our family is buried in the Durham cemetery; I tend to their gravesites at least twice a year. Brothers Dave and Allan graduated from UNH. My grandfather bought the “main house” over 100 years ago, and moved it to its present location – restoring “The Tavern”, built in 1686, into a home. My aunt and uncle owned and lived in what we called “the Little House” nearby. My father and I blazed a trail which became Laurel Lane, which he went on to develop, and on which my parents last owned a home.

My father served on the Board of Selectman for some 33 years, and in the State Legislature, up to his death in 1990. I know well his hard work in hearing and responding to input from citizens – and the difficult decisions his Board had to make. I also know how highly he thought of the Durham Historical Society, and I fully support their recent report. (My mother was involved in land use issues as well, as part of “Save Our Shores”, thwarting the 1970s efforts of Aristotle Onassis to develop an oil refinery in Great Bay!)

I believe I was the first to feed the very first swan on the Pond, circa 1964 – and made many pilgrimages to our shoreline to continue to feed them. I delighted in their cygnets, whose numbers sadly diminished after each young flock (black flies, snapping turtles?) – until one lived to adulthood. I skated on the Pond throughout my childhood – even was rendered unconscious in a fall – and we used the Pond as a shortcut to Town and school in the winter. We canoed on the safe little river. The serenity of that area is exemplary, then and today.

I know my parents would want me to send this submission, to please consider the history and the beauty of the Pond, held up by the Dam, and proceed with restoration and not removal. The pictures I have seen appear to be a stream and likely a muddy bog if the dam is removed. The Pond’s fresh water falling over the dam to the River downstream, leading to salt water, is very unique. Again, I defer to others’ submissions as to the sound reasons to restore the Dam, and not destroy an incredible landmark in the Town of Durham.

Cathy Chamberlin Foutz

April Talon

From: Todd Selig
Sent: Tuesday, January 19, 2021 3:04 PM
To: Monee Morrisette
Cc: April Talon; Richard Reine
Subject: Re: Mill Pond Dam Removal - Monee Morrisette

Dear Monee,

Thank you very much for your email concerning the Mill Pond Dam on the Oyster River. I know the members of the Town Council will give your correspondence consideration along with the many other letters received.

All my very best,

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Monee Morrisette <moneemorrisette@gmail.com>
Date: Tuesday, January 19, 2021 at 2:07 PM
To: Durham Town Council <council@ci.durham.nh.us>
Subject: Mill Pond Dam Removal
Resent-From: <council@ci.durham.nh.us>

Hello,

Thank you for the critical service and decisions you make for our town.

I would like to formally express my support for removal of the Mill Pond Dam.

While this Dam may have served purpose in the past, it is only damaging now. The water quality continues to decline, our fish runs are nearly gone and we need to do better to buffer against extreme weather events.

The argument about presenting the dam for historical state is slightly embarrassing as the Native American groups and the environment would take offense to those historical claims.

The best thing we can do for our children is to remove the dam, show how the environment can recover when we do the right thing. We should not leave them a stagnant impoundments, low on oxygen and a dam that will need to be addressed again in 50 or 100 years.

Thank you,
Monee Morrisette
Longmarsh Road

April Talon

From: Todd Selig
Sent: Wednesday, January 20, 2021 8:38 AM
To: April Talon; Richard Reine
Subject: FW: Keep the Mill Pond Dam - Nicoletta Gullace

Dear April and Rich,

Please include in the file for the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
[a: 8 Newmarket Rd., Durham, NH 03824 USA](mailto:8.Newmarket.Rd.,Durham,NH.03824.USA)
[t: 603.868.5571](tel:603.868.5571) | [m: 603.817.0720](tel:603.817.0720) | [w: www.ci.durham.nh.us](http://www.ci.durham.nh.us)
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Wednesday, January 20, 2021 at 8:05 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Keep the Mill Pond Dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Gullace, Nicoletta [mailto:Nicoletta.Gullace@unh.edu]
Sent: Tuesday, January 19, 2021 4:00 PM
To: Jen Berry
Cc: Gullace, Nicoletta
Subject: Keep the Mill Pond Dam

Dear Durham Council Members,

I am writing to offer my strong support for the statement of the Historic District, advocating the preservation of the Mill Pond Dam.

The Dam is not only a historical landmark, preserving Durham's character as a small New England mill town, but it greatly enhances the beauty of the 180 corridor to Newmarket. The bridge is frequently used as a site for wedding photographs and the Millpond, Mill Pond Dam, and the lovely waterfall are a source of continuity and beauty in a rapidly changing town landscape. One need only look at places where old dams have been removed to see that they turn into mud flats, the water-flow having been disrupted with decades of silt deposits. Ellison Brooke used to run pleasantly under the Ross Road duct in the Stagecoach Farms housing development, until a beaver dam was removed up-stream to prevent flooding. While the reasons for the removal are understandable, the resulting bog is a mat of mud and weeds, with no beauty, sound, or character.

Removing what is Durham's most beautiful remaining landscape feature would be an immensely depressing prospect. Think of how visually impoverished we have been since the vast wooden wall went up around the Spaulding Turnpike, robbing us of the beautiful waterscapes we used to enjoy as we travelled to and from Durham to Newington. I honestly feel pain whenever I approach the new roundabout and find myself boxed in and without the uplifting views that signaled to residents and visitors alike that they were entering a magically beautiful part of the country. I believe that we will all be diminished culturally, aesthetically, and emotionally if we lose the lovely waterfall and Mill Pond, only to find that we have produced a muddy bog in its stead. In the past, we found money for items like the Public Library and the Middle School. Now it is time to find the funds to maintain the Mill Pond Dam, preserving it as one of Durham's most beautiful and Historic features.

Yours sincerely,
Nicoletta F. Gullace
3 Meader Lane
Durham, NH 03824

April Talon

From: Todd Selig
Sent: Wednesday, January 20, 2021 8:40 AM
To: batarvainen@comcast.net
Cc: April Talon; Richard Reine
Subject: Re: The Dam - Barbara Tarvainen

Dear Barbara,

Thank you very much for this feedback relative to the Mill Pond Dam on the Oyster River. I will share it with the members of the Town Council for their review and consideration.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: "batarvainen@comcast.net" <batarvainen@comcast.net>
Date: Tuesday, January 19, 2021 at 7:45 PM
To: Todd Selig <tselig@ci.durham.nh.us>
Subject: The Dam

Good evening,

I have felt for many years that the dam needs to go. The costs of remedying its defects and ongoing maintenance are secondary to ecological issues. The river needs to be allowed to follow its natural course, and these dams which served an industrial purpose centuries ago are impediments to the flow of the water, the spawning of fish and the well being of wildlife. Mill Pond has been abandoned by the swans and its attractiveness as a whole is declining all the time.

Let the river flow naturally. It will be more rather than less beautiful.

Barb Tarvainen

Sent from my iPhone

April Talon

From: sean moriarty <spmoriarty17@yahoo.com>
Sent: Wednesday, January 20, 2021 2:36 PM
To: April Talon; Todd Selig; jberry@ci.durham.nh.us
Cc: Reeddon@ymail.com
Subject: FW: Dam

Good afternoon all,

Please see my neighbor on Durham Point Road, Donald Reed's submission to the town regarding the Mill Pond Dam debacle below. I have cc'd him here so feel free to follow up with him directly if needed. Thanks!

Sean P. Moriarty
8 Durham Point Road

Sent from [Mail](#) for Windows 10

From: [Don Reed](#)
Sent: Monday, January 18, 2021 9:50 PM
To: spmoriarty17@yahoo.com
Subject: Dam

The struggle to maintain a vibrant natural ecosystem should be no surprise to anyone living in the 21st century. I often hear people speak of science, whether it be COVID- 19, global warming, etc. The Mill Pond Dam is no exception to science; we all realize a Dam has existed on that site since 1649, with the current structure built-in 1913. My contention with the proposed rebuilding of the Dam is the financial aspect and the environmental. The Dam once served a purpose more than 100 years ago; now, the purpose is an unnatural vista funded by the taxpayers. I'm no environmental expert or scientist, but shouldn't we be more concerned about restoring the Aquatic Ecosystems instead of a Dam that serves no purpose. I thank you all for your time in reading my opinion on the proposed Dam reconstruction.

Sincerely,

Donald Reed

April Talon

From: Todd Selig
Sent: Thursday, January 21, 2021 11:01 AM
To: April Talon; Richard Reine
Subject: FW: READING THE VHB FEASIBILITY STUDY - Luci Gardner
Attachments: READING THE VHB FEASIBILITY STUDY.pdf

Dear April and Rich,

Please include with the file concerning the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Thursday, January 21, 2021 at 10:51 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: READING THE VHB FEASIBILITY STUDY

Dear Councilors,

For your information.

Jennie-

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Luci Gardner [mailto:lucigardner@comcast.net]
Sent: Thursday, January 21, 2021 10:50 AM
To: Jen Berry
Cc: Luci Gardner
Subject: Fwd: READING THE VHB FEASIBILITY STUDY

Dear Jenny,
Please distribute my "Dam In/Dam Out letter to the Council members et al.
Thank you,
Luci Gardner
603-868-2390

Begin forwarded message:

From: Luci Gardner <lucigardner@comcast.net>
Date: January 21, 2021 at 10:43:18 AM EST
To: Luci Gardner <lucigardner@comcast.net>
Subject: **READING THE VHB FEASIBILITY STUDY**

READING THE VHB FEASIBILITY STUDY

“The Town of Durham has studied options for addressing Dam safety issues for many years. The current study seeks to provide information on the alternatives of removing the Dam entirely as a means of eliminating the safety concern and to examine retaining the Dam to maintain the historic , iconic structure with the impoundment” (VHB Feasibility Study, *afterwards*, Study, ‘Purpose’, p.2).

The Study then winnows down the options to Alternative 3, Dam Stabilization and Alternative 5, Dam Removal.

DAM STABILIZATION is mandated to alleviate safety concerns and will need a waiver, before the Dam can hope to be regulated as a non-menace structure, holding back the impoundment as it has done for many years and is doing now.

The conceptual plan of the VHB ‘project team’ to dredge six areas of the impoundment , removing a total of 11,000 cubic yards to potentially decrease the water level and increase the water quality has nothing to do with Dam Stabilization. The removal is not only wholly irrelevant to Stabilization but may well not be permitted:

“in our coordination with the NH DES and Army Corps of Engineers as of July 17, 2020, dredging of freshwater ponds of this scale has poor likelihood of permits.” Also, “*permitting (for the dredge is) difficult and may be impossible to get*” ((Study).

Can a costly dredge plan, unlikely to be permitted and wholly irrelevant to *mandated* stabilization be read as feasible or practical?

Theoretically, No-Dredge Dam Stabilization , could begin anytime as every aspect of the stabilization plan is well laid out in the Study and well known.

As a tax payer and resident at 61 Durham Point Road, on the Oyster River, not far from the Town landing, I measure alternatives like the present two by ‘ knowns which are practical’.

Contrast the Study analysis for DAM REMOVAL with its many unknowns beginning with the necessity of Channel Restoration involving

“ shaping approximately 600 feet upstream of the Dam to stabilize the Channel and remove 3,000 cubic yards of sediment deep in the center of the impoundment...to minimize potential impacts downstream following Dam Removal.

“ This sediment (the 3,000 c.y.) expected to become mobilized and re-deposited in the tidally influenced reach down stream of the former location if left in place.....downstream transport of sediment is a concern due to the potential for impacts with downstream navigation and ecological resources. To avoid the potential for UNCONTROLLED sediment release negatively impacting the down stream reach..(recommend)..channel restoration ...(2.8, p.12, Study).

Where the 11,000 cubic yards dredge was irrelevant to Stabilization, the Study sees the 3,000 cubic yard removal as critical not to prevent, but to “minimize potential impacts downstream” after Dam Removal.

But, as only 3,000 cubic yards in the Dam Removal plan, but not the 11,000 of cubic yards in the Stabilization/ dredging plan are to be removed from the impoundment, it is unknown as to where those likely tidally mobilized or not 8,000 remaining cubic yards go except downstream past my spot, past the water treatment plant and on to the Bay?

The statements which shocked me most occur on pages 53-54 of the Study comparing sediment net gains and losses,

at 2.8.2, p. 53 : *“...removal of the dam may cause more than 76,000 feet of sediment to mobilize downstream (year one after removal).*

Year five: “..increase to sediment load to the tidal reach beyond NH 108 by more than 155,000 feet and more than 262,000 feet in 50 years” (p.54 Study).

Given tidal means give and take of sediment, I am fearful that with Dam Removal/ Channel Restoration, all that will be accomplished is the

movement of the impoundment down river to the rich silt of the silted in Oyster River and beyond, to grow, to thrive and to blight.

So what is known re Dam Removal with or without Channel Restoration is there will be sediment downstream and lots of it, for years to come. Every model predicts it even if all is projected and the projections use words and phrases such as 'may' as in 'may cause', 'minimize the potential', 'uncontrolled sediment release', '3,000 cubic yards of sediment expected to become mobilized'.

The projections of tidally mobilized sediment from an environmentally unsound impoundment are alarming, even if they are worst case, and they may not be.

Worrisome and unknown also the projection that Dam Removal "may" cause "potential impacts" to archeological resources due to changes in sediment transport related to erosion and/or aggradation...(p. 78, Study, recommending an archeological study prior to Dam Removal).

Further "potential impacts" of Dam Removal such as what the area will look like, water treatment plant stressors, salt water invasives, all can be projected but ultimately are unknown.

Dam Stabilization without the dredge is the only present knowable option because of its defined history, costs, process and results including measurable environmental impact and is therefore more feasible than Dam Removal.

I believe Newmarket recently also opted for Dam fix up rather than removal.

As I like to know where my tax dollars are going and as I do not favor even the best projected unknowns, especially as they impact the environment, my vote and I hope the Councils' is for Dam Stabilization without the dredging.

Luci Gardner
61 Durham Point Road
Durham, N.H.

READING THE VHB FEASIBILITY STUDY

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Luci Gardner
61 Durham Point Road
Durham, N.H.

April Talon

From: Todd Selig
Sent: Thursday, January 21, 2021 11:11 AM
To: sbogle@therpc.org
Cc: April Talon; Richard Reine
Subject: FW: Mill Pond Dam - Scott Bogle
Attachments: Bogle Letter on Mill Pond Dam.pdf

Dear Scott,

Thank you very much for this very thoughtful feedback concerning the future of the Mill Pond Dam on the Oyster River. I know members of the Council will review and consider it along with the other correspondence they receive.

All my best,

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Scott Bogle <sbogle@therpc.org>
Date: Wednesday, January 20, 2021 at 8:01 PM
To: Durham Town Council <council@ci.durham.nh.us>
Subject: Mill Pond Dam
Resent-From: <council@ci.durham.nh.us>

Dear Council Members,

I'm writing to comment for the first time on the long running debate over what to do about the Mill Pond dam. I've read many of the letters and emails compiled on the Town website along with the recent VHB study of rehabilitation and removal options and earlier studies. Of the options defined by VHB I'd like to urge the Council to support Alternative 3 – Stabilization. The dam and the Mill Pond itself are central elements of Durham's character, providing a connection to the town's history, a recreational resource, and an ecological habitat that, while different from that which existed 400 years ago, has value of its own.

I grew up in Durham in the 1970s and 1980s, and like a lot of Durham kids learned to skate on the Mill Pond and the backwater in the winter and to canoe and fish there in the summer. If the ice was covered with snow,

we would cross country ski on the backwater and in the woods bordering it. Yes, the town has built Churchill rink as a location to skate: in tight circles and amid crowds and at narrowly designated hours. There's a value to keeping places in town though, close to neighborhoods, for skating in open air and open space - just as we recognize that exploring trails at Wagon Hill is a different experience than walking laps at the UNH indoor track. I moved back to Durham to raise my kids here and would like for them to grow up with some of the same experiences I remember on the river and the pond.

Regarding history, many citizens have noted the dam's eligibility for the National Register of Historic Places and the details of the current dam's construction and figures in Durham's history involved with dam design construction. Those focused on dam removal note the relatively recent 1913 construction date of the current dam, but before it timber dams stood in the same place going back more than 300 years. The town grew up around the mills supported by these earlier dams. To me the dam and the pond are symbols of Durham and are part of the southern gateway to the town.

I don't think we can say that removing the dam will restore the natural ecosystem of 400 years ago. It could improve conditions for anadromous fish on a stretch of the Oyster River, though it would be a short stretch of river as the dam for the Oyster River Reservoir is less than two miles upstream. Elimination of the pond and the bulk of the water volume of the backwater through dam removal will in turn damage habitat for many other species - mammals, fish, insects, and plants - adapted to the current ecosystem. Recovery of native plant species in the event of dam removal is also far from inevitable. Invasive species like buckthorn, Japanese knotweed and loosestrife seem like the more likely beneficiaries of water drawdown.

Finally, those supporting dam removal tend to assume the highest cost scenario (dam rehabilitation plus dredging) to argue that removing the dam is far cheaper than saving it. Stabilizing the dam as provided for in Alternative 3 is only marginally more expensive than dam removal. The more substantial cost is in dredging the pond. If dredging is removed from the equation this cost difference is greatly reduced. It is worth thinking about property tax revenue implications of eliminating the pond and greatly diminishing the backwater. Property owners along the pond and backwater who now benefit from a water body that supports swimming and canoeing will instead abut a stream with very low dry season water flow and almost certainly look to the town for a reduction in the tax premium that goes along with waterfront property. Over time I suspect that lost revenue could be substantial and offset what removal advocates point to as a cost savings from eliminating the dam.

We have friends and neighbors on both sides of this debate. I like and respect many I know who argue for dam removal, but I see too many losses for the town coupled with uncertain benefits from removing the dam. I appreciate the difficult decision ahead of the Town Council and thank you for considering the points here.

Sincerely,

Scott Bogle
4 Croghan Lane

Scott Bogle
4 Croghan Lane
Durham, NH 03824

Katherine Marple, Chair
Durham Town Council
Town Administrator's Office
8 Newmarket Road
Durham, NH 03824

Dear Ms. Marple,

I'm writing to comment for the first time on the long running debate over what to do about the Mill Pond Dam. I've read many of the letters and emails compiled on the Town website along with the recent VHB study of rehabilitation and removal options and earlier studies. Of the options defined by VHB I want to urge the Council to support Alternative 3 – Stabilization. The dam and the Mill Pond itself are central elements of Durham's character, providing a connection to the town's history, a recreational resource, and an ecological habitat that, while different from that which existed 400 years ago, has value of its own.

I grew up in Durham in the 1970s and 1980s, and like a lot of Durham kids learned to skate on the Mill Pond in the winter and to canoe and fish on the pond and backwater in the summer. If the ice was covered with snow, we would cross country ski on the backwater and in the woods bordering it. Yes, the town has built Churchill rink as a location to skate, in tight circles and amid crowds and at narrowly designated hours. There's a value to keeping places in town, close to neighborhoods, for skating in open air and open space though; just as we recognize that exploring trails at Wagon Hill is a different experience than walking laps at the UNH indoor track. I moved back to Durham to raise my kids here and would like for them to grow up with some of the same experiences I remember on the river and the pond.

Regarding history, many citizens have noted the dam's eligibility for the National Register of Historic Places and the details of the current dam's construction and figures in Durham's history involved with dam design construction. Those focused on dam removal note the relatively recent 1913 construction date of the current dam, but before it, timber dams stood in the same place going back more than 300 years. The town grew up around the mills supported by these earlier dams. To me the dam and the pond are symbols of Durham and are part of the southern gateway to the town.

I don't think we can say that removing the dam will restore the natural ecosystem of 400 years ago. It could improve conditions for anadromous fish on a stretch of the Oyster River, though it would be a short stretch of river as the dam for the Oyster River Reservoir is less than two miles upstream. Elimination of the pond and the bulk of the water volume of the backwater through dam removal will in turn damage habitat for many other species – mammals, fish, insects, and

plants - adapted to the current ecosystem. Recovery of native plant species in the event of dam removal is also far from inevitable. Invasive species like buckthorn, Japanese knotweed and loosestrife seem like the more likely beneficiaries of water drawdown.

Finally, those supporting dam removal have also assumed the highest cost scenario (dam rehabilitation plus dredging) to argue that removing the dam is far cheaper than saving it. Stabilizing the dam as provided for in Alternative 3 is only marginally more expensive than dam removal. The more substantial cost is in dredging the pond. If dredging is removed from the equation this cost difference is greatly reduced. It is worth thinking about property tax revenue implications of eliminating the pond and greatly diminishing the backwater. Property owners along the pond and backwater who now benefit from a water body that supports swimming and canoeing will instead abut a stream with very low dry season water flow and almost certainly look to the town for a reduction in the tax premium that goes along with waterfront property. Over time I suspect that lost revenue could be substantial and offset what supporters point to as a cost savings from dam removal.

We have friends and neighbors on both sides of this debate. I like and respect many I know who argue for dam removal, but I see too many losses for the town coupled with uncertain benefits from removing the dam. I appreciate the difficult decision ahead of the Town Council and thank you for considering the points here.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Bogle". The signature is stylized and cursive, with the first name "Scott" and last name "Bogle" clearly legible.

Scott Bogle

April Talon

From: Harris, Larry <Larry.Harris@unh.edu>
Sent: Thursday, January 21, 2021 11:35 AM
To: April Talon
Cc: Richard Reine
Subject: A letter on the dam
Attachments: Mill Pond Dam.docx

Dear April,
Attached is a letter responding to some issues relating to dam removal or repair. All the best, Larry

Ms. April Talon, Town Engineer

21 January 2021

Dear April,

I have read a number of the letters on the website in favor of dam removal and feel it is important to respond to some of the assertions concerning the benefits of dam removal.

1. One letter asserted that dam removal will provide for increased area for boating at high tide. If there is indeed an elevated ledge at the dam site, then there will be no increased space for boating at high tide beyond the dam in the foreseeable future. However, there is close to a mile of pond beyond the dam, though current access is very difficult. Access could be facilitated by establishing a small launch structure on the Milne Sanctuary because it fronts on the main channel. A similar launch structure could be established at the public access site next to the Freedman property on Laurel Lane.
2. Restoration and Invasive Species. During the drawdown in 2017, the Oyster River where it entered the backwater was the size of College Brook and the view up the backwater showed a similar shallow ribbon of water and extensive exposed mud flats. If you want to know what the future of the backwater will be after dam removal, walk along the parking lot in the Mill Plaza and view College Brook. It is an impassable jungle of invasives and poison ivy. When people talk about restoration of the newly exposed area of the pond and backwater, they give no information on how that would occur or how much it would cost. Just the area of the pond is extensive and would be a major undertaking to manage the incursion of invasives on the exposed flats. Beyond the narrows is more than half a mile of backwater that the town is unlikely to spend time and finances to manage. Look at College Brook below the Plaza parking lot.
3. Restoration of fish runs. There have been dams on the Mill Pond for over 300 years and the current dam has been in place since 1913. However, the fish ladder was only opened in 1976. In 1992, over 157,000 herring migrated into the pond and river using the fish ladder. In 2020, the number was less than 5,000. There appear to be two primary causes for this significant decline in numbers – (1) faulty operation of the fish ladder and/or (2) lack of water flow released from the water supply dam upstream. I would argue that they are related and dam removal will not solve the issue of water flow. Until there is a comprehensive analysis of how the upper dam influences the downstream hydrology, there is only speculation on the benefits of dam removal and more information is needed before a decision is made.
4. Toxic sediments. The VHB report includes a major section on toxins and heavy metals in the sediments in the Mill Pond. The sources of those metals and toxins need to be identified and the impact of removing the dam and release of those sediments needs further evaluation. Repairing the dam without dredging would contain the sediments and provide recreational opportunities while determining how best to deal with them.

In summary, I believe it would be both economical and provide the most benefit to the town to repair the dam without dredging. At the same time, it is critical to address the issues of water flow and toxic sediments in the near future.

Sincerely yours,

Larry G. Harris, Professor Emeritus of Biological Sciences
56 Oyster River Rd., larry.harris@unh.edu, 603-815-2155

April Talon

From: Todd Selig
Sent: Thursday, January 21, 2021 11:39 AM
To: April Talon; Richard Reine
Subject: FW: Mill Pond Dam - Peter Brown

Dear April and Rich,

For the public file at DPW on the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Thursday, January 21, 2021 at 11:31 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Mill Pond Dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

-----Original Message-----

From: Peter Brown [<mailto:dutchman79@comcast.net>]

Sent: Thursday, January 21, 2021 10:57 AM

To: Jen Berry

Subject: Mill Pond Dam

To Whom It May Concern:

I would like my opinion as to what choice to make for the Mill Pond Dam to be recognized as the following:

I am in favor of removing the dam for both fiscal (lowest cost) and ecological (we don't need a swamp in our downtown) reasons.

I would consider any other alternatives as long as the extra cost is paid, exclusively, by those supporting that alternative. The extra cost should also include additional money for mosquito spraying and compensation paid to those who feel depressed about having to see a swamp in their downtown.

Sincerely,

Peter Brown

35 Sandy Brook Drive

Sent from my iPad

April Talon

From: Todd Selig
Sent: Friday, January 22, 2021 10:43 AM
To: April Talon; Richard Reine
Subject: FW: Mill Pond Dam - Captain Peter A. Whelan
Attachments: Captain Peter Whelan gov marine fish.doc

Dear April and Rich,

For inclusion with the Mill Pond Dam on the Oyster River file.

Todd

Todd I. Selig, Administrator
Town of Durham, NH

a: 8 Newmarket Rd., Durham, NH 03824 USA

t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us

He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Peter Whelan <pawhelan@comcast.net>
Date: Friday, January 22, 2021 at 10:04 AM
To: Durham Town Council <council@ci.durham.nh.us>
Cc: Scot Calitri <smcalitri@gmail.com>, Kyle Schaefer <kyle@soulflyoutfitters.com>, Zak Robinson <zak@risingtideanglers.com>
Subject: Mill Pond Dam
Resent-From: <council@ci.durham.nh.us>

Dear Durham Town Council

Attached is a letter in support of the removal of the Mill Pond Dam

Best regards

Peter Whelan

Captain Peter A. Whelan
Shoals Fly Fishing and Light Tackle
100 Gates Street
Portsmouth, New Hampshire 03801
www.shoalsflyfishing.com

Captain Peter Whelan
Shoals Fly Fishing & Light Tackle

100 Gates Street
Portsmouth, New Hampshire 03801

603.427.0401 Home

603.205.5318 Cell

www.shoalsflyfishing.com

pawhelan@comcast.net

United States Coast Guard License # 2561857

Registered Maine Tidewater Guide License # 457015

Dear; Katherine Marple,
Durham Town Council Chair and Members of the Council

I am writing to support the removal of the Mill Pond Dam at the head of tide for the Oyster River. As a Charter Captain/Guide for over 20 years fishing Great Bay and the Seacoast, the Dam removals which allow fish passage are critical to our fragile ecosystem. I am also a member of the Portsmouth City Council and I understand these decisions can be emotional, but with climate change and our fragile ecosystems, these dam removals give our fish more spawning habitat which has been under attack the past decade.

The science is clear as to the removal of dams on our Seacoast Rivers feeding into The Great Bay. Each dam removal is a positive move toward restoring our migratory fish populations in our sensitive estuaries here in New Hampshire. Allowing these critical rivers to flow freely is restoring them to their historic place where fresh and saltwater meet naturally.

I participated in one of the first dam removals on the Seacoast as President of Coastal Conservation Association of New Hampshire. An old wooden crypt dam removal on the Belamny River was a joint federal and state project which opened up critical spawning

habitat for river herring, rainbow smelt, alewives and shad. These bait fish are critical to our Striped Bass and other species as key forage fish as the Striped Bass migrate into the Great Bay for the summer.

My charter business along with the thousands of recreational saltwater anglers along the coast rely on these spawning areas for forage fish. The complex ecosystem which is Great Bay relies on the five major river systems providing healthy spawning habitat. The Oyster river is part of this complex puzzle. Striped bass rely on forage fish spawning areas. This is why our Stripers migrate to the Great Bay each year in search of forage fish to feed on and grow to spawning size.

The economic impact of our Striped Bass fishery is huge here in New Hampshire. Recreational spending on boats, fishing tackle, hotels, restaurants and other tourist activities drive our Seacoast summer economy.

The recent removal of the Exeter dam in downtown Exeter opened up a very large area of spawning habitat for forage fish as the river now flows freely.

I ask you to approve the removal of the Mill Pond Dam.

Sincerely Yours.

Captain Peter A. Whelan

April Talon

From: Todd Selig
Sent: Friday, January 22, 2021 3:43 PM
To: Anna
Cc: April Talon; Richard Reine
Subject: Re: support for removal of mill pond dam - Anna Stewart

Dear Anna,

Thank you very much for this feedback relative to the Oyster River Dam on the Mill Pond. I know the members of the Council will consider it along with the other correspondence and information they receive.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Anna <annastew29@gmail.com>
Date: Friday, January 22, 2021 at 2:33 PM
To: Durham Town Council <council@ci.durham.nh.us>
Subject: support for removal of mill pond dam
Resent-From: <council@ci.durham.nh.us>

To Whom it May Concern,

As a Durham Resident and a former Oyster River student, I am strongly in favor of removing the Mill Pond Dam.

I listened to a bit of the discussion and have read some too.

What strikes me most:

- Those speaking for repair seem to be mostly interested in their own interests. "Our view, our land, my..."
- Every word toward dam removal is for the Common Good. None of the dam removal voices will benefit personally from this choice, they're trying to do the right thing for our town and the future.

I hope to raise a family in Durham in the future and I would rather show my kids the lovely environment than an aging dam and dying river system and pond.

Thank you.
- Anna Stewart, Longmarsh Road

April Talon

From: Todd Selig
Sent: Saturday, January 23, 2021 9:31 AM
To: Matt De Angelis
Cc: Durham Town Council; April Talon; Richard Reine
Subject: Re: Please remove mill pond dam

Dear Matt and Susan,
Thank you very for this feedback.
Todd

Todd Selig
Durham, NH USA
Cell: 603.817.0720
Sent from my iPhone.
~~ Please pardon typographical errors.

On Jan 23, 2021, at 9:16 AM, Matt De Angelis <mjdeangelis@comcast.net> wrote:

As a Durham Resident, I would like to show my support for Removal of the Mill Pond Dam of the Oyster River.

Historically, the Oyster River teemed with native fish, supported a wide array of flora and fauna. "History" started way before the arrival of European settlers. The native peoples and the environment pre-predated western settlements by 10,000 and millions of years, respectively.

Ecologically, the Oyster supported some of the largest runs of river herring and is our last stronghold of Blueback herring in our river systems. The deteriorating water quality, lack of oxygen and limited spawning grounds continues to plague these survivors. The Oyster River herring run is down 97% to only 3% of what it was in 1992.

Economically, removal of the dam is fiscally prudent. Dam repair only delays additional needs for funds as a dam is a human-made structure that will need maintenance or replacement in the future.

I hope that in these days of information and ecological significance, you can support the correct decision and support removal of the Mill Pond Dam.

Thank you for this voice and consideration.

Matthew De Angelis & Susan Friedrich
171 Packers Falls Rd
Durham, NH 03824
603.659.7067

Sent from my iPhone

April Talon

From: Todd Selig
Sent: Monday, January 25, 2021 8:45 AM
To: April Talon; Richard Reine
Subject: FW: Damn dam - Jay Gooze

Dear April and Rich,

Please add this correspondence to the public folder relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Monday, January 25, 2021 at 8:40 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Damn dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

-----Original Message-----

From: Jay Gooze [<mailto:jbgooze@gmail.com>]

Sent: Friday, January 22, 2021 6:30 PM

To: Jen Berry

Subject: Damn dam

During my tenure on the Town council I had a chance to study a number of engineering reports concerning the dam. It is not just the money involved but also a chance to clean up the quality of the water in that area. I hope the council will vote to remove the dam. Jay Gooze

Sent from my iPad

April Talon

From: Todd Selig
Sent: Monday, January 25, 2021 8:45 AM
To: April Talon; Richard Reine
Subject: FW: My support for Mill Pond Dam REMOVAL - Heather Grant

Dear April and Rich,

Please add this correspondence to the public folder relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Monday, January 25, 2021 at 8:39 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: My support for Mill Pond Dam REMOVAL

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

-----Original Message-----

From: Heather Grant [<mailto:hcgrant51@gmail.com>]
Sent: Friday, January 22, 2021 5:22 PM
To: Jen Berry
Subject: My support for Mill Pond Dam REMOVAL

I am not sure if public comments are still being accepted, but I wanted to say that I support removal, not only due to complexity of continuous dredging for future years, but the fact that if the dam was not existing and someone now proposed to build one, it would be broadly opposed!
Our history is not always something to cling to, yes respect it, note it on a commemorative sign, but the area should be naturalized.

Thank you for reading, respectfully Heather Grant, 7 Emerson Rd

Sent from my iPad

April Talon

From: Todd Selig
Sent: Monday, January 25, 2021 8:45 AM
To: April Talon; Richard Reine
Subject: FW: Mill Pond Dam Removal - Linda Evans

Dear April and Rich,

Please add this correspondence to the public folder relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Monday, January 25, 2021 at 8:38 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Mill Pond Dam Removal

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Linda Evans [mailto:ljeanmevans@gmail.com]
Sent: Friday, January 22, 2021 4:23 PM
To: Jen Berry
Subject: Mill Pond Dam Removal

Dear Durham Town Council members,

I have been a resident of Durham for the last seven years but my connection extends back to my days as a graduate student in the late 70"s.My sister and brother-in-law and nephews are lifelong residents of Durham.

I am writing to support the removal of the Mill Pond dam. I walk by the Mill Pond daily and have watched its slow but steady decline. The removal of the dam and the restoration of its natural state will improve the health of the Mill Pond. The dam serves no vital purpose and town funds should not be used to support it.

Thank you.

Linda Evans
3 Bucks Hill Road
Durham, NH

April Talon

From: Todd Selig
Sent: Monday, January 25, 2021 8:46 AM
To: April Talon; Richard Reine
Subject: FW: Mill Pond Dam - Richard Woodrow

Dear April and Rich,

Please add this correspondence to the public folder relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Monday, January 25, 2021 at 8:26 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Mill Pond Dam

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

From: Richard Woodrow [mailto:richrw@gmail.com]
Sent: Friday, January 22, 2021 9:09 AM
To: Jen Berry
Subject: Mill Pond Dam

*** Resending with corrected spelling for "dam". I should drink coffee before writing emails! Please use this copy in any official record. :-)

-Rich

*****"

Good morning,

I want to add my voice to those who have thoughtfully and objectively advocated for the removal of the Mill Pond Dam. It seems an obvious choice to return the river to its natural state given the drastic difference in cost, the benefits to our local natural environment, and the lack of any functional purpose for the dam. The arguments in favor seem rooted in nostalgia rather than the reality of the dam's condition, the cost to apply the expensive band-aid solution, and the benefits to the health of the beautiful Oyster River that winds through our community. Furthermore, I feel it is irresponsible to apply substantial funds (and continued long term maintenance) to a project that provides no real benefit to our community when funds are lacking for other legitimate priorities.

Kind regards,

Richard Woodrow
Durham Resident

April Talon

From: Todd Selig
Sent: Monday, January 25, 2021 8:47 AM
To: April Talon; Richard Reine
Subject: FW: Dam Removal - Robin Calitri

Dear April and Rich,

Please add this correspondence to the public folder relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Robin Calitri <csicagain@hotmail.com>
Date: Saturday, January 23, 2021 at 7:00 PM
To: Durham Town Council <council@ci.durham.nh.us>
Cc: Scot Calitri <smcalitri@gmail.com>
Subject: Dam Removal
Resent-From: <council@ci.durham.nh.us>

As an avid fisherman, fishing guide and one who is awed by the beauty of nature I am supporting the removal of the Durham Dam. It appears that the only resistance to the removal is a few landowners who fear some loss of property values. There is no objective source which validates this claim. If the water above the dam is drawn down, these owners will actually increase the amount of usable land which borders their property. Dam removal will get rid of the stagnant, sediment filled holding pond. It will increase the flow of fresh water. It will allow native fishes to access more of the river in which to spawn and prosper. This should enhance the quality of water entering Great Bay and enhance the natural cycles of predator- forage, fowl, plant life and clean water. Please vote for posterity to enjoy a more natural river. Sincerely Captain Robin Calitri, Seacoastflyfishing.com

Robin Calitri

April Talon

From: Todd Selig
Sent: Monday, January 25, 2021 8:47 AM
To: April Talon; Richard Reine
Subject: FW: Mill pond dam - Doris Irwin

Dear April and Rich,

Please add this correspondence to the public folder relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Monday, January 25, 2021 at 8:43 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Mill pond dam

Dear Councilors,

For your information.

Jennie-

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

-----Original Message-----

From: Doris Irwin [<mailto:dorisirwin@gmail.com>]

Sent: Saturday, January 23, 2021 3:54 PM

To: Jen Berry

Subject: Mill pond dam

I am strongly in favor of removal of the dam. Will this issue be put before the town to vote on in March?

Thank you,

--

Doris B. Irwin

April Talon

From: Todd Selig
Sent: Monday, January 25, 2021 8:48 AM
To: April Talon; Richard Reine
Subject: FW: Contact submission: Contact Us - George Kutzelman

Dear April and Rich,

Please add this correspondence to the public folder relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Monday, January 25, 2021 at 8:45 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: FW: Contact submission: Contact Us

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

-----Original Message-----

From: The Town of Durham New Hampshire via The Town of Durham New Hampshire [<mailto:jberry@ci.durham.nh.us>]
Sent: Saturday, January 23, 2021 5:41 PM
To: Jen Berry
Subject: Contact submission: Contact Us

A new Contact Us form submission is awaiting review at <https://www.ci.durham.nh.us/node/7/submission/2521>

Submitted on Saturday, January 23, 2021 - 5:40pm

Submitted by user: Visitor

Submitted values are:

First Name: George

Last Name: Kutzelman

Email: gkutzelman@yahoo.com

Phone Number: 6032750131

Subject: Dam removal

Question/Comment: Please count me in on helping in any way with the mill pond dam removal. So important to bring back the fish runs and for clean water.

April Talon

From: Todd Selig
Sent: Monday, January 25, 2021 12:14 PM
To: Richard Reine; April Talon
Subject: FW: Mill Pond-Note from Alice Clark
Attachments: Preserve Mill Pond Dam-Alice Clark.pdf

Dear April and Rich,

Please add this correspondence to the public folder relative to the Mill Pond Dam on the Oyster River.

Todd

Todd I. Selig, Administrator
Town of Durham, NH
a: 8 Newmarket Rd., Durham, NH 03824 USA
t: 603.868.5571 | **m:** 603.817.0720 | **w:** www.ci.durham.nh.us
He/him/his pronouns

Do your part to help stop the spread of Covid-19: Wear a mask around others, avoid close physical contact, monitor your health, wash hands/disinfect!

From: Jennie Berry <jberry@ci.durham.nh.us>
Date: Monday, January 25, 2021 at 10:55 AM
To: Allan Howland <al.howland.13@gmail.com>, Andrew Corrow <andrew_corrow@yahoo.com>, Carden Welsh <cardentc2@gmail.com>, Dinny Waters <dinny.tod@gmail.com>, 'Jim Lawson' <lawsonje24@comcast.net>, "'kittyfmarple@comcast.net'" <kittyfmarple@comcast.net>, Sally Needell <sneedelltc@gmail.com>, Sally Tobias <Sally.tobias@me.com>, Todd Selig <tselig@ci.durham.nh.us>, Wayne Burton <wburton@northshore.edu>
Subject: Mill Pond-Note from Alice Clark

Dear Councilors,

For your information.

Jennie--

Jennie Berry
Admin. Assistant
Town of Durham
8 Newmarket Road
Durham, NH 03824
(603) 868-5571

^a
So, I'm encouraging you
to preserve Mill Pond and
do not tarnish all the hard
work + concerns of the Milnes,
caretakers,

Alice Clark

St. Ann Rehab 3046

Dover, NH 03828

I am presently in St. Ann Rehab.
Year ago, I skated on Mill Pond
and took my children there where
they learned how to skate. We
enjoyed the swans + other birds.

Please bring back Mill Pond
area so that birds return and
though now deceased, in their
honor (the Milnes) caretakers,
are remembered for their under-
standing of the environment.

2

So, I'm encouraging you
to preserve Mill Pond and
do not tarnish all the hard
work + concerns of the Milnes,
caretakers.

Alice Clark
St. Ann Rehab 304L
Dover, NH 03828

I am presently in St. Ann Rehab.
Years ago, I skated on Mill Pond
and took my children there where
they learned how to skate. We
enjoyed the swans & other birds.

Please bring back Mill Pond
area so that birds return and
though now deceased, in their
honor (the Milnes) caretakers,
are remembered for their under-
standing of the environment.

April Talon

From: Todd Selig
Sent: Saturday, January 23, 2021 5:26 PM
To: April Talon
Cc: Claire Merenda; Richard Reine
Subject: Re: Oyster River Dam/ Mill Pond

Thank you, Claire. Much appreciated.
Todd

Todd Selig
Durham, NH USA
Cell: 603.817.0720
Sent from my iPhone.
~~ Please pardon typographical errors.

On Jan 23, 2021, at 4:58 PM, April Talon <atalon@ci.durham.nh.us> wrote:

Dear Claire
Thank you for taking the time to write . It is certainly an important decision. We will share your input with the Town Council.

Thank you
April
Get [Outlook for iOS](#)

From: Claire Merenda <clairefm@comcast.net>
Sent: Saturday, January 23, 2021 4:38:29 PM
To: April Talon <atalon@ci.durham.nh.us>
Subject: Oyster River Dam/ Mill Pond

Hi April,

I have recently been made aware of the town input between the 2 final choices to save the OR dam or not. Having read of late that many towns all over the country have opted to replace dams with more natural sustainable solutions that take into consideration, construction costs, maintenance costs, use and habitats, I think it practical and wise to let the Mill Pond go back to its natural habitat and not invest such a substantial amount of money, time and resources to rebuild and maintain the dam when a more reasonable cost benefits our habitats in a cost effective way.

Our preference is for a warrant article to be voted on in March to decide on this important issue.

Thanking you in advance,
Claire and Michael Merenda
2 Fox Hill Rd
Durham NH

Sent from my iPhone